



# DOCUMENT CHANGE REQUEST

DCR number 1365 Changes required for: General

Originator: Steve Thacker

Date: 2024/02/29

Date sent: 2020/07/28

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

Title: Transistors High Power PNP, based on type BUX78

Number: 5204/006

Issue: 6

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



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DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Transistors Low Power PNP, based on type 2N2905A

Number: 5202/002 Issue: 5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

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  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



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DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

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DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diodes Switching, based on types 1N5807 through 1N5811

Number: 5101/013 Issue: 6

Other documents affected:

5101/014-5, 5101/026-6, 5101/027-5, 5103/029-12, 5103/030-9, 5103/031-10, 5103/032-3, 5103/033-2, 5106/016-10, 5106/017-7, 5106/018-8, 5106/019-9, 5106/020-5, 5106/021-5, 5106/023-4, 5106/024-2, 5201/001-8, 5201/002-10, 5201/003-5, 5201/004-8, 5201/006-6, 5201/011-6, 5201/019-9, 5201/020-1, 5202/001-10, 5202/002-5, 5202/008-7, 5202/014-9, 5203/004-5, 5203/010-9, 5203/011-5, 5203/016-6, 5204/002-9, 5204/006-6, 5205/021-8, 5205/022-7, 5205/023-7, 5205/024-7, 5205/025-7, 5205/029-7, 5207/002-10, 5207/003-5, 5207/005-8, 5207/009-4

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

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Status:	IMPLEMENTED				

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Justification:

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Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Diodes, Silicon, Power Rectifier , High Efficiency, Fast Recovery, based on type BYW81-200

Number:	5103/029	Issue:	12
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

**ITEMS AFFECTED**  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

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For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:  
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Date: 2024/02/29

Date sent: 2020/07/28

Originator: Steve Thacker

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

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Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors High Power NPN, based on type 2N5672

Number: 5203/004 Issue: 5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

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Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

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- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:





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Title:	TRANSISTORS, POWER, MOSFET, N-CHANNEL, RAD-HARD BASED ON TYPE STRH100N6		
Number:	5205/022	Issue:	7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

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DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diodes, Power Rectifier, High Efficiency Fast Recovery , based on Type BYV 54-200

Number: 5103/031 Issue: 10

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

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Status:	IMPLEMENTED				

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Title: Diode, Rectifier, High Voltage based on types STTH40200 and STTH60200

Number: 5103/033 Issue: 2

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

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Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
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Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors, Low Power, Complementary NPN/PNP Based on type 2ST3360

Number: 5207/009 Issue: 4

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

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Title:	TRANSISTORS, POWER, MOSFET, N-CHANNEL, RAD-HARD BASED ON TYPE STRH40N6		
Number:	5205/024	Issue:	7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

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Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

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STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.





## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors High Power NPN, based on type BUX77

Number: 5203/016 Issue: 6

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
    - 2072: for Transistor Die and packaged Variants
    - 2078: for Diode Die and packaged Variants
    - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
  - No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
  - No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
  - No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).
- Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Diodes Silicon Switching, based on types 1N6639, 1N6640 and 1N6641

Number: 5101/027 Issue: 5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title:	Matched Dual Transistors NPN, based on type 2N3350				
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Number:	5207/003	Issue:	5
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors Low Power NPN, based on type 2N2219A		
Number:	5201/003	Issue:	5

Other documents affected:

Page:  
as applicable

Paragraph:  
Manufacturers Appendix (for STM)

Original wording:  
As per current published specification

Proposed wording:  
As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

**ITEMS AFFECTED**  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

**DESCRIPTION OF DEVIATIONS**  
For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diodes, Silicon, Power Schottky Rectifier based on Type 1N5822U

Number:	5106/020	Issue:	5
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:





## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Diodes, Power Rectifier, Schottky Barrier, based on type STPS20100		
Number:	5106/016	Issue:	10

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors Low Power NPN, based on type 2N3700

Number: 5201/004 Issue: 8

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors High Power NPN, based on type 2N5154		
Number:	5203/010	Issue:	9

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diode, Power, Schottky Rectifier, based on Type STPS80A45C and STPS40A45C

Number: 5106/024 Issue: 2

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Diodes Switching, based on types 1N5802, 1N5804, 1N5806, 1N5802US, 1N5804US, 1N5806US and

Number: 5101/014 Issue: 5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)





## DOCUMENT CHANGE REQUEST

DCR number 1365 Changes required for: General

Date: 2024/02/29

Date sent: 2020/07/28

Originator: Steve Thacker

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:

STM answer is clear : preference for MIL specifications except for radiation test method.

Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors Low Power NPN, based on type 2N2222A

Number: 5201/002 Issue: 10

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
    - 2072: for Transistor Die and packaged Variants
    - 2078: for Diode Die and packaged Variants
    - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
  - No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
  - No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
  - No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).
- Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors Low Power NPN, based on type 2N2484		
Number:	5201/001	Issue:	8

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diodes Power Rectifier Schottky Barrier based on Type STPS40100

Number:	5106/019	Issue:	9
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Diodes Silicon Switching, based on types 1N6638, 1N6642 and 1N6643

Number: 5101/026 Issue: 6

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number 1365 Changes required for: General

Date: 2024/02/29

Date sent: 2020/07/28

Originator: Steve Thacker

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:

STM answer is clear : preference for MIL specifications except for radiation test method.

Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.





# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title:	Matched Dual Transistors NPN, based on types 2N2919/2N2920 and 2N2920A				
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Number:	5207/002	Issue:	10
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors Low Power PNP, based on type 2N2907A		
Number:	5202/001	Issue:	10

Other documents affected:

Page:  
as applicable

Paragraph:  
Manufacturers Appendix (for STM)

Original wording:  
As per current published specification

Proposed wording:  
As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number 1365 Changes required for: General

Date: 2024/02/29

Date sent: 2020/07/28

Originator: Steve Thacker

Organisation: ESCC Executive Secretariat

Status: IMPLEMENTED

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:

STM answer is clear : preference for MIL specifications except for radiation test method.

Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors Matched Dual PNP, based on types 2N3810 and 2N3811

Number: 5207/005 Issue: 8

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
    - 2072: for Transistor Die and packaged Variants
    - 2078: for Diode Die and packaged Variants
    - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
  - No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
  - No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
  - No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).
- Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Diode, Silicon, Power Rectifier, Schottky Barrier, based on Type STPS1045		
Number:	5106/017	Issue:	7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title:	Transistors, Low Power, NPN, based on type 2ST15300				
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Number:	5201/020	Issue:	1		
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

**ITEMS AFFECTED**  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

**DESCRIPTION OF DEVIATIONS**

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:





## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	TRANSISTORS, POWER, MOSFET, N-CHANNEL, RAD-HARD BASED ON TYPE STRH8N10		
Number:	5205/023	Issue:	7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors, Power, MOSFET, N-Channel, RAD-HARD, based on Type STRH100N10FSY3

Number: 5205/021 Issue: 8

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title: Diode, Power, Schottky Rectifier, Surface Mount based on Type STPS80A150, STPS60A150

Number: 5106/023 Issue: 4

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diode, Silicon, Power Schottky Rectifier, based on Type 1N5819

Number: 5106/021 Issue: 5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors Low Power NPN, based on type 2N2369A		
Number:	5201/006	Issue:	6

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

## ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

## DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)





## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: TRANSISTORS, POWER, MOSFET, P-CHANNEL, RAD-HARD BASED ON TYPE STRH40P10

Number: 5205/025 Issue: 7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors High Voltage NPN, based on type 2N5551		
Number:	5201/019	Issue:	9

Other documents affected:

Page:  
as applicable

Paragraph:  
Manufacturers Appendix (for STM)

Original wording:  
As per current published specification

Proposed wording:  
As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

#### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

#### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Diode, Silicon, Power Rectifier, Schottky Barrier, based on Type STPS6045

Number:	5106/018	Issue:	8
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

ITEMS AFFECTED  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	TRANSISTORS, POWER, MOSFET, P-CHANNEL, RAD-HARD BASED ON TYPE STRH12P10		
Number:	5205/029	Issue:	7

Other documents affected:

Page:  
as applicable

Paragraph:  
Manufacturers Appendix (for STM)

Original wording:  
As per current published specification

Proposed wording:  
As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.





# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title:	Transistors Low Power PNP, based on type 2N5401				
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Number:	5202/014	Issue:	9		
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

**ITEMS AFFECTED**  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

**DESCRIPTION OF DEVIATIONS**

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors High Power NPN, based on types 2N3439 and 2N3440		
Number:	5203/011	Issue:	5

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



# DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title:	Transistors Low Power RF NPN, based on type 2N3019				
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Number:	5201/011	Issue:	6		
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Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

**ITEMS AFFECTED**  
Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

**DESCRIPTION OF DEVIATIONS**

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)

- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).

- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).

Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Transistors Low Power PNP, based on type 2N4033		
Number:	5202/008	Issue:	7

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

### Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

Title: Transistors High Power PNP, based on type 2N5153

Number: 5204/002 Issue: 9

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)
- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:





## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for:	General	Originator:	Steve Thacker
Date:	2024/02/29	Date sent:	2020/07/28	Organisation:	ESCC Executive Secretariat
Status:	IMPLEMENTED				

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Title:	Diode, Rectifier, High Voltage, Surface Mount Based on type STTH60400		
Number:	5103/032	Issue:	3

Other documents affected:

Page:

as applicable

Paragraph:

Manufacturers Appendix (for STM)

Original wording:

As per current published specification

Proposed wording:

As part of the ESCC System Improvement Review - Replacing Referenced Test Methods by Suitable Alternatives review, the listed ESCC Detail Specifications, all under ESCC Generic Specification No. 5000, shall have the following deviations added to the STMICROELECTRONICS (F) appendix

### ITEMS AFFECTED

Para. 2.1.1, Deviations from the Generic Specification: Para. 8, Test Methods and Procedures.

### DESCRIPTION OF DEVIATIONS

For qualification and qualification maintenance, or procurement of qualified or unqualified components, the following replacement test method specifications may be used in place of the following ESCC Basic Specifications:

- No. 20400, Internal Visual Inspection (Para. 8.2): may be replaced by MIL-STD-750 Test Method:
  - 2072: for Transistor Die and packaged Variants
  - 2078: for Diode Die and packaged Variants
  - 2069: for Power MOSFET Die and packaged Variants (to be confirmed by ST by 2020 week 35)
- No. 20500, External Visual Inspection (Para. 8.6): may be replaced by: MIL-STD-750 Test Method 2071 (all types)



## DOCUMENT CHANGE REQUEST

DCR number	1365	Changes required for: General	Originator: Steve Thacker
Date: 2024/02/29		Date sent: 2020/07/28	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED			

- No. 20900, Radiographic Inspection of Electronic Components (Para. 8.14): may be replaced by MIL-STD-750 Test Method 2076 (all types).
- No. 21400, Scanning Electron Microscope Inspection of Semiconductor Dice (Para. 8.3 & 9.5): may be replaced by MIL-STD-750 Method 2077 (for Power MOSFET Die and packaged Variants).  
Note: the deviation on ESCC No. 21400 shall only be included for those particular Detail Specifications that specifically refer to it.

Justification:

The conclusion of the PSWG task ESCC improvement - ESCC conversion to MIL for Manufacturer STM, as stated in the 84th PSWG MoM, was:  
STM answer is clear : preference for MIL specifications except for radiation test method.  
Accordingly, the various referenced ESCC test methods should each be made replaceable by the appropriate MIL specification test method.

Note: there was no consensus between the 3 ESCCQPL Manufacturers (STM, Infineon, Cobham) supporting ESCC No. 5000 to remove and replace the various ESCC Basic specifications; some Manufacturers preferred to retain these ESCC Basic specifications in ESCC No. 5000 i.e. Infineon, Cobham. Accordingly STMs preferred change to apply the MIL spec alternatives, as is reflected in this DCR, is to be implemented by changes to the various Detail Specs supported by STM.

Attachments:

N/A

Modifications:

Remove the replacement MIL method 2069, applicable to ESCC No. 20400, from this DCR:  
i.e. delete:  
\*2069: for Power MOSFET Die and package Variants ( confirmed by ST)

Approval signature:

Date signed:

2024-02-29