DOCUMENT CHANGE REQUEST

DCR number 422	Changes required for: N/A	Originator: aissa nehdi
Date: 2008/07/24	Date sent: 2008/07/24	Organisation: CNES
Status: IMPLEMENTED		

Title:	Transistors High Voltage NPN, based on type 2N5551		
Number:	5201/019	Issue:	3

Other documents affected:

Page:

1.4.2 Component Type Variants page 5
1.6 PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION page 6

Paragraph:

1.4.2 Component Type Variants page 5
1.6 PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION page 6

Original wording:

Proposed wording:

Variants 8 & 9 added (Chip Carrier Package CCP) 3 terminal

Justification:

NA

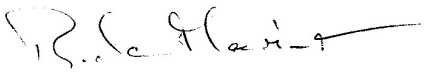
Attachments:

dcr422att08_09_19.pdf, DCR422att.pdf, null

Modifications:

See attachment

Approval signature:



Date signed:

2008-07-24

MODIFIED ATTACHMENT FOR DCR422

SHOWING "APPROVED WORDING" IF DIFFERENT FROM "PROPOSED WORDING":

S.T. 19/9/08.

1.4.2 Component Type Variants
The component type variants applicable to this specification are as follows:

Variant Number	Based on Type	Case	Lead/Terminal Material and finish	Weight max g
01	2N3700	TO-18	D2	0.4
02	2N3700	TO-18	D3 or D4	0.4
04	2N3700	CCP	2	0.06
05	2N3700	CCP	4	0.06
06	2N3700	CCP	2	0.06
07	2N3700	CCP	4	0.06

see markup of Para 1.4.2 attached. *

1.7 Functional Diagram
see markup of Para 1.7 attached.

1. GENERAL

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics and test and inspection data for the component type variants and/or the range of components specified below. It supplements the requirements of, and shall be read in conjunction with, the ESCC Generic Specification listed under Applicable Documents.

1.2 APPLICABLE DOCUMENTS

The following documents form part of this specification and shall be read in conjunction with it:

(a) ESCC Generic Specification No. 5000
(b) MIL-STD-750, Test Methods and Procedures for Semiconductor Devices

1.3 TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS

For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESCC Basic Specification No. 21300 shall apply.

1.4 THE ESCC COMPONENT NUMBER AND COMPONENT TYPE VARIANTS

1.4.1 The ESCC Component Number

The ESCC Component Number shall be constituted as follows:

Example: 520101901

- Detail Specification Reference: 5201019
- Component Type Variant Number: 01 (as required)

1.4.2 Component Type Variants

The component type variants applicable to this specification are as follows:

(3 Terminal)

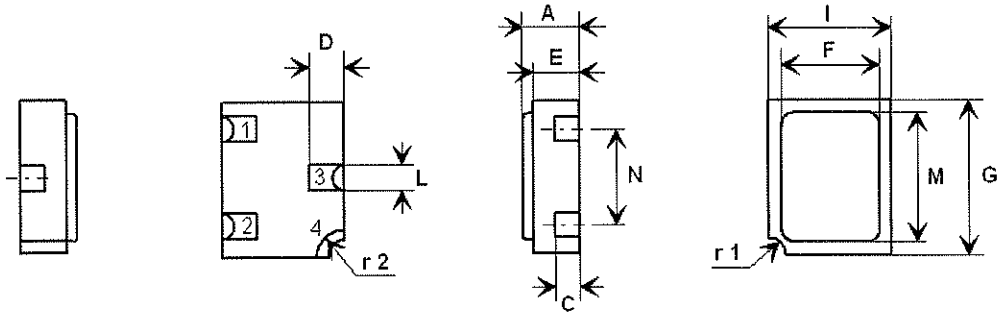
Variant Number	Based on Type	Case	Lead/Terminal Material and/or Finish	Weight max g
01	2N5551	TO-18	D2	0.4
02	2N5551	TO-18	D3 or D4	0.4
04	2N5551	CCP	2	0.06
05	2N5551	CCP	4	0.06
06	2N5551	TO-39	D2	1.5
07	2N5551	TO-39	D3 or D4	1.5

The lead/terminal material and/or finish shall be in accordance with the requirements of ESCC Basic Specification No. 23500.

08	2N5551	CCP (4 Terminal)	2	0.06
09	2N5551	CCP (4 Terminal)	4	0.06

4 4

1.6.3 Chip Carrier Package (CCP) - 3 terminal



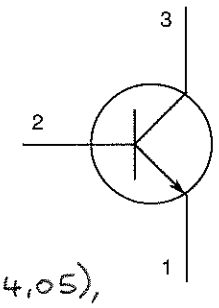
Symbols	Dimensions mm		Notes
	Min	Max	
A	1.15	1.5	
C	0.45	0.56	2
D	0.6	0.91	2
E	0.91	1.12	
F	1.9	2.15	
G	2.9	3.25	
I	2.4	2.85	
L	0.4	0.6	2
M	2.4	2.65	
N	1.8	2	
r1	0.3 TYPICAL		1
r2	0.56 TYPICAL		1

NOTES:

1. Terminal identification is specified by reference to the corner notch position where terminal 1 = emitter, terminal 2 = base, terminal 3 = collector, terminal 4 = shielding connected to the lid.
2. Applies to all terminals, 1, 2, 3

not exceed 0.254mm.
6. The details of outline in this zone are optional.
7. Measured from the Tab Centreline.

1.7 FUNCTIONAL DIAGRAM



1. Emitter.
2. Base.
3. Collector.
4. Shielding

3 terminal (Variants 04,05),

NOTES:
1. For TO-18 and TO-39, the collector is internally connected to the case.
2. For CCP, the lid is not connected to any terminal.
3. For 4 terminal CCP (Variants 08,09), the shielding terminal is connected to the lid.

1.8 MATERIALS AND FINISHES

Materials and finishes shall be as follows:

a) Case
For metal can packages, the case shall be hermetically sealed and have a metal body with hard glass seals.

For the chip carrier package the case shall be hermetically sealed and have a ceramic body with a Kovar lid.

b) Leads/Terminals
As specified in Component Type Variants.

2. REQUIREMENTS

2.1 GENERAL

The complete requirements for procurement of the components specified herein are as stated in this specification and the ESCC Generic Specification. Permitted deviations from the Generic Specification, applicable to this specification only, are listed below.

Permitted deviations from the Generic Specification and this Detail Specification, formally agreed with specific Manufacturers on the basis that the alternative requirements are equivalent to the ESCC requirement and do not affect the component's reliability, are listed in the appendices attached to this specification.

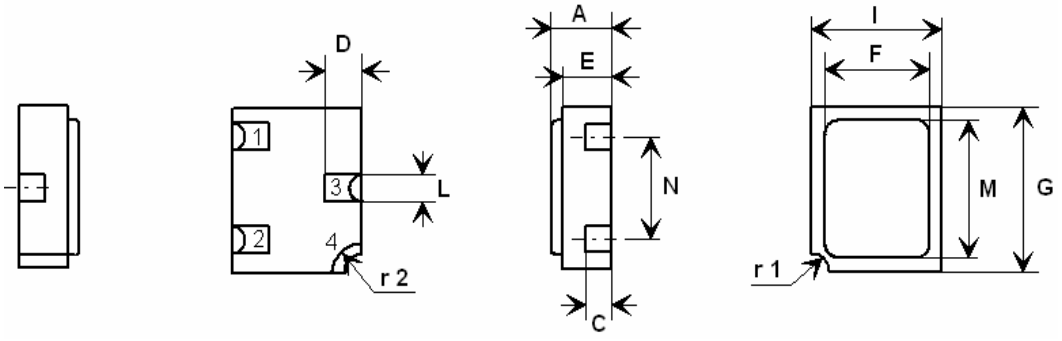
2.1.1 Deviations from the Generic Specification

(a) Deviation from Screening Tests - Chart F3

1.4.2 Component Type Variants
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05	2N3700	**CCP**	**4**	**0.06**
06	2N3700	**CCP**	**2**	**0.06**
07	2N3700	**CCP**	**4**	**0.06**

1.6.3 Chip Carrier Package (CCP) - 3 terminal



Symbols	Dimensions mm		Notes
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D	0.6	0.91	2
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NOTES:

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2. Applies to all terminals.