



**CONTACTS, ELECTRICAL, CRIMP, FOR 3401/002
CONNECTORS**

ESCC Detail Specification No. 3401/005

| | |
|---------|-----------|
| Issue 7 | June 2013 |
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| DCR No. | CHANGE DESCRIPTION |
|---------|---|
| 795 | Specification updated to incorporate editorial changes per DCR. |

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1 GENERAL

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics, test and inspection data for Contacts, Electrical, Crimp, Gauge 20 and 22, for 3401/002 Connectors.

These contacts shall be packed separately from the connectors and may be procured either with the connectors or separately.

This specification shall be read in conjunction with:

- ESCC Generic Specification No. 3401, Connectors, Electrical, Non-Filtered, Circular and Rectangular,
- ESCC Detail Specification No. 3401/002, Connectors, Electrical, Rectangular, Removable Crimp Contacts, Based on Type D*MA,

the requirements of which are supplemented herein.

1.2 TYPE VARIANTS

The different sizes of contacts specified herein, which are also covered by this specification, are scheduled in Table 1(a).

1.3 MAXIMUM RATINGS

The maximum ratings, which shall not be exceeded at any time during use or storage, applicable to the contacts specified herein, are as scheduled in Table 1(b).

1.4 PARAMETER DERATING INFORMATION

Not applicable.

1.5 PHYSICAL DIMENSIONS

The physical dimensions of the contacts specified herein are shown in Figure 2.

TABLE 1(a) – TYPE VARIANTS

| Variant | Type | Mating End Size | Crimp Barrel Size | Rated Current A | Accept Wire AWG | Max. Weight g | Engagement & Separation | | | | Contact Capability | |
|---------|--------|-----------------|-------------------|--------------------|--------------------|------------------|-------------------------|------------------------|----------------------|-------|--------------------|---------------|
| | | | | | | | Engag. Forces N (1) | Separ. Forces N (1) | Test Pins Dia. mm | | Weight | |
| | | | | | | | | | Min. | Max. | Pick-up (2) g | Drop (3) g |
| | | | | | | | | | | | | |
| 01 | Male | 20 | 20 | 7.5 | 20 | 0.16 | - | - | - | - | - | - |
| 02 | Female | | | | | 0.18 | 3.33 | 2.22 | 1.039 | 1.040 | - | 226.8 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 03 | Male | 20 | 26 | 3 | 26 | 0.18 | - | - | - | - | - | - |
| 04 | Female | | | | | 0.21 | 3.33 | 2.22 | 1.039 | 1.040 | - | 226.8 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 05 | Male | 20 | 18 | 7.5 | 18 | 0.3 | - | - | - | - | - | - |
| 06 | Female | | | | | 0.32 | 3.33 | 2.22 | 1.039 | 1.040 | - | 226.8 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 07 | Male | 22 | 22 | 5 | 22 | 0.08 | - | - | - | - | - | - |
| 08 | Female | | | | | 0.11 | 3.33 | 2.22 | 0.773 | 0.775 | - | 226.8 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| Variant | Contact Retention Force Max. N | Contact Insertion and Withdrawal Forces Max. N | Probe Damage | | | Oversize Pin Excl. | | |
|---------|-----------------------------------|---|----------------|---------------|-------|--------------------|------------------|-------|
| | | | Moment N.cm | Probe Dia. mm | | Force Max. N | Test Pin Dia. mm | |
| | | | | Min. | Max. | | Min. | Max. |
| 01 | 40 | 18.5 | - | - | - | - | - | - |
| 02 | 40 | 18.5 | 5.65 | 1.007 | 1.033 | 3.33 | 1.166 | 1.17 |
| 03 | 40 | 18.5 | - | - | - | - | - | - |
| 04 | 40 | 18.5 | 5.65 | 1.007 | 1.033 | 3.33 | 1.166 | 1.17 |
| 05 | 40 | 18.5 | - | - | - | - | - | - |
| 06 | 40 | 18.5 | 5.65 | 1.007 | 1.033 | 3.33 | 1.166 | 1.17 |
| 07 | 40 | 18.5 | - | - | - | - | - | - |
| 08 | 40 | 18.5 | 1.3 | 0.749 | 0.774 | 2.43 | 0.905 | 0.907 |

NOTES:

- 1st line, maximum values with maximum diameter test pin; 2nd line, minimum values with minimum diameter test pin.
- With minimum diameter test pin and minimum insertion depth of 4mm.
- With maximum diameter test pin and minimum insertion depth of 4mm.

TABLE 1(b) – MAXIMUM RATINGS

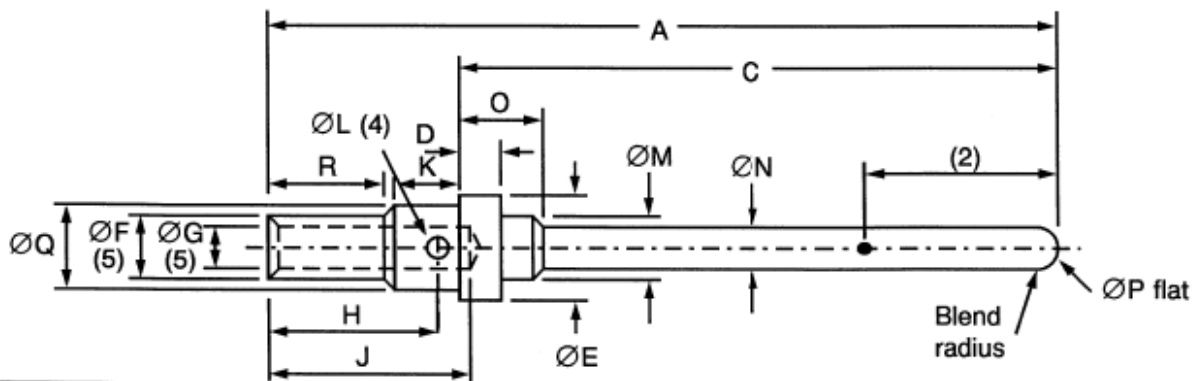
| No. | Characteristics | Symbol | Maximum Rating | | Unit |
|-----|-----------------------------|-----------|----------------|----------------|------|
| | | | Min. | Max. | |
| 1 | Rated Current | I_{CR} | - | See Table 1(a) | A |
| 2 | Operating Temperature Range | T_{op} | -55 | +125 | °C |
| 3 | Storage Temperature Range | T_{stg} | -65 | +125 | °C |

FIGURE 1 – PARAMETER DERATING INFORMATION

Not applicable

FIGURE 2 – PHYSICAL DIMENSIONS

VARIANTS 01 AND 03 – MALE CONTACTS

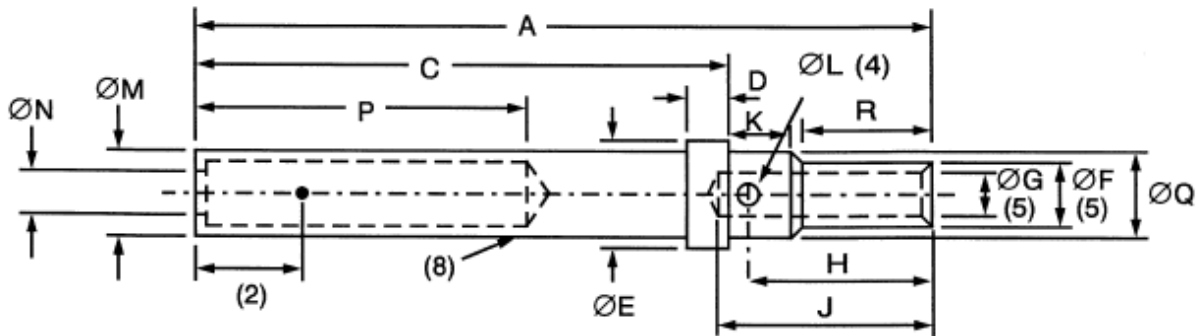


| | A | <u>C</u> | D | <u>ØE</u> | <u>ØF</u> | <u>ØG</u> | H | J | K | <u>ØL</u> | <u>ØM</u> | <u>ØN</u> | <u>Ø</u> | <u>ØP</u> | <u>ØQ</u> | R |
|------|-------|----------|------|-----------|-----------|-----------|------|-----|------|-----------|-----------|-----------|----------|-----------|-----------|-----|
| Min. | - | 9.8 | 0.72 | 2.08 | 1.65 | 1.09 | 3.4 | 3.8 | 1.01 | 0.6 | 1.78 | 0.99 | 1.65 | - | 1.7 | 2.4 |
| Max. | 14.14 | 10 | 0.86 | 2.16 | 1.73 | 1.17 | 3.68 | 4.7 | 1.25 | 0.8 | 1.85 | 1.04 | 1.75 | 0.3 | 1.8 | - |

NOTES:

- All dimensions are in millimetres.
- Measurement point for plating thickness: 4±1.
- Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
- Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
- ØF and ØG to be concentric within 0.04.
- ØG of Variant 03 shall be 0.59 minimum, 0.66 maximum.
- ØL of Variant 03 shall be 0.45 minimum, 0.55 maximum.

VARIANTS 02 AND 04 – FEMALE CONTACTS

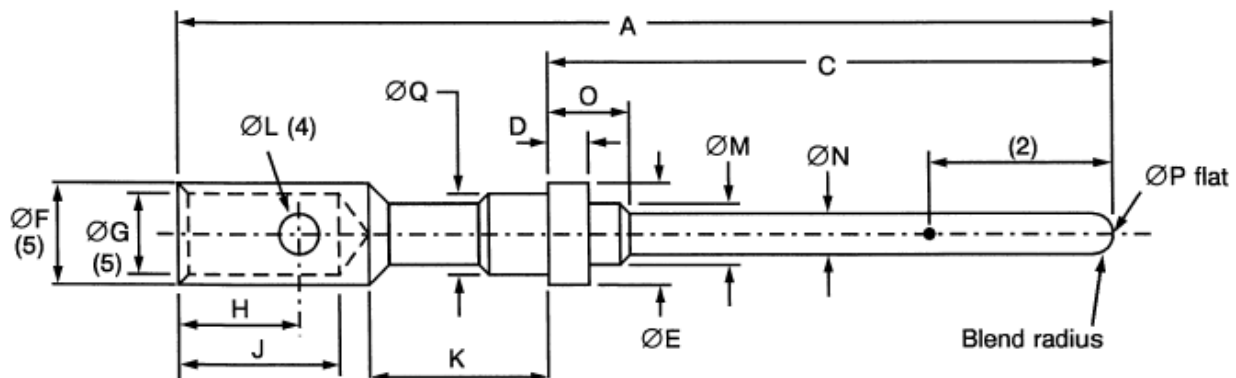


| | A | <u>C</u> | D | <u>ØE</u> | <u>ØF</u> | <u>ØG</u> (6) | H | J | K | <u>ØL</u> (7) | ØM | ØN | <u>P</u> | <u>ØQ</u> | R |
|------|------|----------|------|-----------|-----------|------------------|------|-----|------|------------------|------|------|----------|-----------|-----|
| Min. | - | 9.45 | 0.72 | 2.08 | 1.65 | 1.09 | 3.4 | 3.8 | 1.01 | 0.6 | 1.7 | 1.07 | 7 | 1.7 | 2.4 |
| Max. | 13.8 | 9.65 | 0.86 | 2.16 | 1.73 | 1.17 | 3.68 | 4.7 | 1.25 | 0.8 | 1.85 | 1.14 | - | 1.8 | - |

NOTES:

1. All dimensions are in millimetres.
2. Measurement point for plating thickness: 2±1.
3. Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
4. Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
5. ØF and ØG to be concentric within 0.04.
6. ØG of Variant 04 shall be 0.59 minimum, 0.66 maximum.
7. ØL of Variant 04 shall be 0.45 minimum, 0.55 maximum.
8. The mechanical pressure member shall be shrouded. Sleeve, if used, shall conform to the applicable requirements.

VARIANT 05 – MALE CONTACT

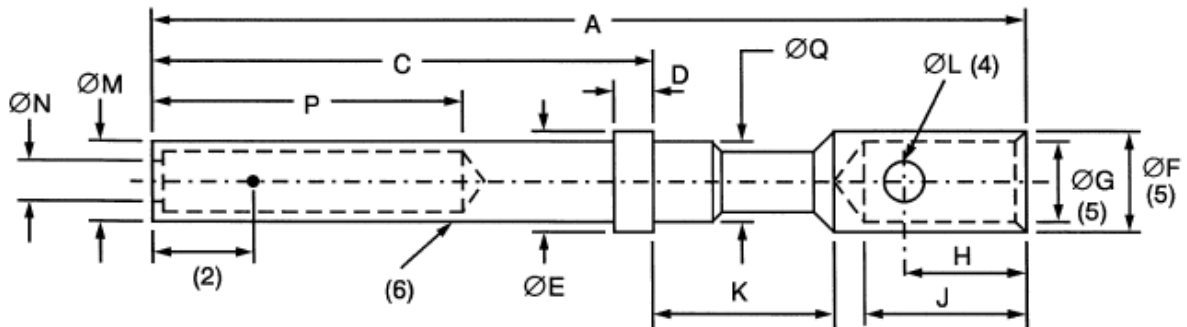


| | A | <u>C</u> | D | <u>ØE</u> | <u>ØF</u> | <u>ØG</u> | H | J | K | <u>ØL</u> | ØM | ØN | <u>Q</u> | ØP | <u>ØQ</u> |
|------|-------|----------|------|-----------|-----------|-----------|-----|------|------|-----------|------|------|----------|-----|-----------|
| Min. | - | 9.8 | 0.72 | 2.08 | 2.09 | 1.65 | 3.8 | 4.32 | 6.15 | 0.6 | 1.78 | 0.99 | 1.65 | - | 1.7 |
| Max. | 21.13 | 10 | 0.86 | 2.16 | 2.18 | 1.74 | 4 | 4.7 | 6.45 | 0.8 | 1.85 | 1.04 | 1.75 | 0.3 | 1.8 |

NOTES:

1. All dimensions are in millimetres.
2. Measurement point for plating thickness: 4±1.
3. Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
4. Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
5. ØF and ØG to be concentric within 0.04.

VARIANT 06 – FEMALE CONTACT

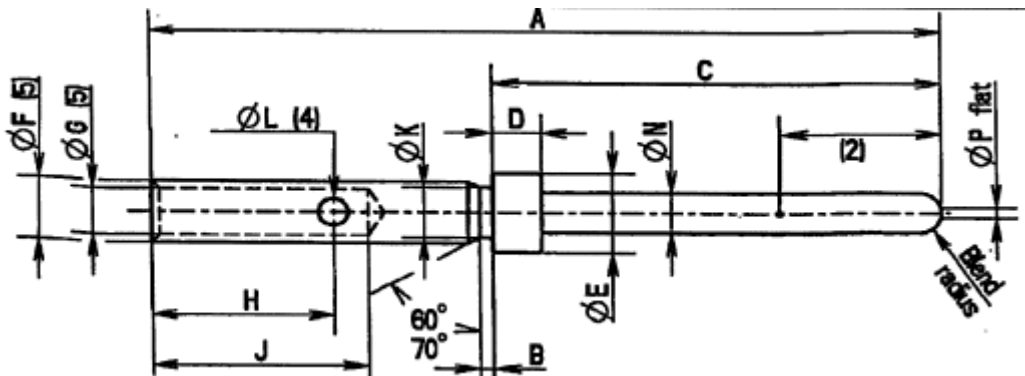


| | A | <u>C</u> | D | <u>ØE</u> | ØF | <u>ØG</u> | H | J | K | ØL | ØM | ØN | P | ØQ |
|------|------|----------|------|-----------|------|-----------|-----|------|------|-----|------|------|---|-----|
| Min. | - | 9.45 | 0.72 | 2.08 | 2.09 | 1.65 | 3.8 | 4.32 | 6.15 | 0.6 | 1.7 | 1.07 | 7 | 1.7 |
| Max. | 20.8 | 9.65 | 0.86 | 2.16 | 2.18 | 1.74 | 4 | 4.7 | 6.45 | 0.8 | 1.85 | 1.14 | - | 1.8 |

NOTES:

1. All dimensions are in millimetres.
2. Measurement point for plating thickness: 2±1.
3. Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
4. Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
5. ØF and ØG to be concentric within 0.04.
6. The mechanical pressure member shall be shrouded. Sleeve, if used, shall conform to the applicable requirements.

VARIANT 07 – MALE CONTACT

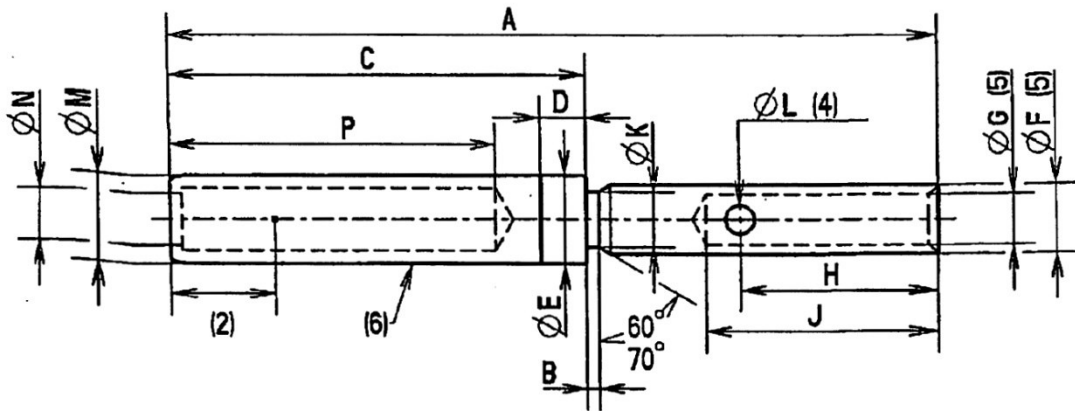


| | A | B | <u>C</u> | <u>D</u> | <u>ØE</u> | ØF | <u>ØG</u> | H | J | ØK | ØL | <u>ØN</u> | ØP |
|------|-------|------|----------|----------|-----------|------|-----------|------|------|------|------|-----------|-----|
| Min. | - | 0.2 | 7.49 | 0.74 | 1.52 | 1.17 | 0.85 | 3.09 | 3.58 | 0.91 | 0.46 | 0.75 | - |
| Max. | 13.64 | 0.25 | 7.62 | 0.84 | 1.57 | 1.22 | 0.9 | 3.27 | 3.99 | 1.01 | 0.56 | 0.77 | 0.2 |

NOTES:

1. All dimensions are in millimetres.
2. Measurement point for plating thickness: 4±1.
3. Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
4. Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
5. ØF and ØG to be concentric within 0.04.

VARIANT 08 – FEMALE CONTACT



| | A | B | <u>C</u> | <u>D</u> | <u>ØE</u> | ØF | ØG | H | J | ØK | ØL (4) | ØM | ØN | ØP |
|------|-------|------|----------|----------|-----------|------|------|------|------|------|--------|------|------|------|
| Min. | - | 0.2 | 7.08 | 0.74 | 1.52 | 1.17 | 0.85 | 3.09 | 3.58 | 0.91 | 0.46 | - | 0.78 | 4.22 |
| Max. | 13.41 | 0.25 | 7.34 | 0.84 | 1.57 | 1.22 | 0.9 | 3.27 | 3.99 | 1.01 | 0.56 | 1.57 | - | - |

NOTES:

1. All dimensions are in millimetres.
2. Measurement point for plating thickness: 2±1.
3. Underlined dimensions, in table, are critical to ensure intermateability and interchangeability.
4. Inspection hole shall only penetrate one wall of the crimp barrel. May be square, i.e. L×L.
5. ØF and ØG to be concentric within 0.04.
6. The mechanical pressure member shall be shrouded. Sleeve, if used, shall conform to the applicable requirements.

2 APPLICABLE DOCUMENTS

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

- (a) ESCC Generic Specification No. 3401, Connectors, Electrical, Non-Filtered, Circular and Rectangular.
- (b) ESCC Detail Specification No. 3401/002, Connectors, Electrical, Rectangular, Removable Crimp Contacts, Based on Type D*MA.
- (c) MIL-G-45204, Gold Plating, Electro-deposited.
- (d) MIL-C-14450, Copper Plating, Electro-deposited.

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.

4 REQUIREMENTS

4.1 GENERAL

The complete requirements for procurement of the contacts specified herein are stated in this specification and ESCC Generic Specification No. 3401. Deviations from the Generic Specification, applicable to this specification only, are listed in Para. 4.2.

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

4.2 DEVIATIONS FROM GENERIC SPECIFICATION

4.2.1 Deviations from Special In-process Controls

None.

4.2.2 Deviations from Final Production Tests (Chart II)

None.

4.2.3 Deviations from Burn-in and Electrical Measurements (Chart III)

Chart III is not applicable.

4.2.4 Deviations from Qualification Tests (Chart IV)

(a) Para. 9.31, Solderability: Not applicable.

4.2.5 Deviations from Lot Acceptance Tests (Chart V)

(a) Para. 9.31, Solderability: Not applicable.

4.3 MECHANICAL REQUIREMENTS

4.3.1 Dimension Check

The dimensions of the contacts specified herein shall be verified in accordance with the requirements set out in Para. 9.6 of ESCC Generic Specification No. 3401 and shall conform to those shown in Figure 2 of this specification. Only the underlined dimensions shall be checked during procurement.

4.3.2 Weight

The maximum weight of the contacts specified herein shall be as specified in Table 1(a).

4.3.3 Contact Capability

For the purpose of this test, the pick-up and drop weights shall be as specified in Table 1(a).

4.3.4 Contact Retention (In Insert)

The contact retention force shall be as specified in Table 1(a).

4.3.5 Mating and Unmating Forces

As specified in ESCC Detail Specification No. 3401/002.

- 4.3.6 Insert Retention (In Shell)
As specified in ESCC Detail Specification No. 3401/002.
- 4.3.7 Jackscrew Retention
As specified in ESCC Detail Specification No. 3401/002.
- 4.3.8 Contact Insertion and Withdrawal Forces
The contact insertion and withdrawal forces shall be as specified in Table 1(a).
- 4.3.9 Engagement and Separation Forces
The diameter of the test pin and the engagement and separation forces of the female contacts shall be as specified in Table 1(a).
- 4.3.10 Oversize Pin Exclusion
The diameter of the test pin and the force applied to it shall be as specified in Table 1(a).
- 4.3.11 Probe Damage
The probe diameter and the moment at the end of the probe shall be as specified in Table 1(a).
- 4.3.12 Solderability
Not applicable.
- 4.4 MATERIALS AND FINISHES
The materials and finishes shall be as specified herein. Where a definite material is not specified, a material which will enable the components specified herein to meet the performance requirements of this specification shall be used. Acceptance or approval of any constituent material does not guarantee acceptance of the finished product.
- 4.4.1 Shells
As specified in ESCC Detail Specification No. 3401/002.
- 4.4.2 Inserts
As specified in ESCC Detail Specification No. 3401/002.
- 4.4.3 Contacts
The contact body shall be made of copper alloy with an underplate of 1µm minimum of non-magnetic nickel or copper to MIL-C-14450, gold plated with 1.27µm minimum of gold, Type 2 Grade C of MIL-G-45204.

The female contact spring element shall be made of copper alloy with an underplate of 1µm minimum of nickel or copper to MIL-C-14450, gold plated with 1.27µm minimum of gold, Type 2 Grade C of MIL-G-45204.
- 4.4.4 Contact Retaining Clip
As specified in ESCC Detail Specification No. 3401/002.
- 4.4.5 Guiding and Locking Devices
As specified in ESCC Detail Specification No. 3401/002.
- 4.4.6 Magnetism Level
As specified in ESCC Detail Specification No. 3401/002.

4.5 MARKING

4.5.1 General

The marking of all components delivered to this specification shall be in accordance with the requirements of ESCC Basic Specification No. 21700 and the following subparagraphs.

These components being too small to accommodate the marking as specified hereafter, the full marking information shall accompany each lot of components in its primary package. Such marking shall comprise:

- (a) The ESCC Component Number.
- (b) Traceability information.

4.5.2 The ESCC Component Number

Each component shall bear the ESCC Component Number which shall be constituted and marked as follows:

Example: 340100501B

- Detail Specification Number: 3401005
- Type Variant (see Table 1(a)): 01
- Testing Level: B.

4.5.3 Traceability Information

Traceability information shall be marked in accordance with the requirements of ESCC Basic Specification No. 21700.

4.6 ELECTRICAL MEASUREMENTS

4.6.1 Electrical Measurements at Room Temperature

The parameters to be measured in respect of electrical characteristics are scheduled in Table 2. Unless otherwise specified, these measurements shall be performed at $T_{amb} = +22 \pm 3$ °C.

4.6.2 Electrical Measurements at High and Low Temperatures (Table 3)

Not applicable.

4.6.3 Circuits for Electrical Measurements (Figure 4)

Not applicable.

4.7 BURN-IN AND ELECTRICAL MEASUREMENTS (TABLES 4 AND 5)

Not applicable.

4.8 ENVIRONMENTAL AND ENDURANCE TESTS

4.8.1 Measurements and Inspections on Completion of Environmental Tests

The parameters to be measured and inspections to be performed on completion of environmental testing are scheduled in Table 6. Unless otherwise specified, these measurements shall be performed at $T_{amb} = +22 \pm 3$ °C.

4.8.2 Measurements and Inspections at Intermediate Points during Endurance Tests

Not applicable.

4.8.3 Measurements and Inspections on Completion of Endurance Tests

The parameters to be measured and inspections to be performed on completion of endurance tests shall be those specified in Table 6. Unless otherwise specified, these measurements shall be performed at $T_{amb} = +22 \pm 3 \text{ }^\circ\text{C}$.

4.8.4 Conditions for Operating Life Test (Part of Endurance Testing)

Not applicable.

4.8.5 Electrical Circuits for Operating Life Test

Not applicable.

4.8.6 Conditions for High Temperature Storage Test (Part of Endurance Testing)

The requirements for the high temperature storage test are specified in Section 9 of ESCC Generic Specification No. 3401. The conditions for high temperature storage testing shall be the maximum storage temperature specified in Table 1(b) of this specification.

TABLE 2 – ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE

| No. | Characteristics | Symbol | Specification and/or Test Method | Test Condition | Variants | Limits | | Unit |
|-----|--|--------|----------------------------------|----------------|----------------|--------|------|------|
| | | | | | | Min. | Max. | |
| 1 | Contact Resistance (Low Level Current) | Rcl | ESCC No. 3401 Para. 9.1.1.3 | Para. 9.1.1.3 | All | - | 6 | mΩ |
| 2 | Contact Resistance (Rated Current) | Rcr | ESCC No. 3401 Para. 9.1.1.3 | Para. 9.1.1.3 | | | | |
| | | | | 7.5A | 01, 02, 05, 06 | - | 5 | mΩ |
| | | | | 3A | 03, 04 | - | 5 | mΩ |
| | | | | 5A | 07, 08 | - | 5 | mΩ |

TABLES 3, 4 AND 5

Not applicable

TABLE 6 – MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL AND ENDURANCE TESTS

| No. | ESCC Generic No. 3401 | | Measurements and Inspections | | Symbol | Limits | | Unit |
|-----|---------------------------------------|--|---|---------------------------|--------|--------------------------|------|------|
| | Environmental and Endurance Tests (1) | Test Method and Conditions | Identification | Conditions | | Min. | Max. | |
| 01 | Wiring | Para. 9.10 & Table 1(a) of this spec. | Low Level Contact Resistance | Table 2 Item 1 | Rcl | Table 2 Item 1 | | |
| 02 | Vibration | Para. 9.11 | ESCC 3401/002 | | | | | |
| 03 | Shock or Bump | Para. 9.12 | ESCC 3401/002 | | | | | |
| 04 | Climatic Sequence | Para. 9.13 | ESCC 3401/002 | | | | | |
| 05 | Seal Test | Para. 9.9 | ESCC 3401/002 | | | | | |
| 06 | Plating Thickness | Para. 9.14 | Thickness | - | - | Para. 4.4.3 of this spec | | |
| 07 | Joint Strength | Para. 9.15 | ESCC 3401 Para. 9.15 | | | | | |
| 08 | Rapid Change of Temperature | Para. 9.16 | ESCC 3401/002 | | | | | |
| 09 | Contact Retention (in Insert) | Para. 9.17 & Para. 4.3.4 of spec. | Contact Displacement | - | - | ESCC 3401 Para. 9.17 | | |
| 10 | Endurance | Para. 9.18 | Initial Measurements Low Level Contact Resistance | Table 2 Item 1 | Rcl | Record Values | | mΩ |
| | | | Final Measurements Low Level Contact Resistance Drift | Table 2 Item 1 | ΔRcl | - | 3 | mΩ |
| 11 | Permanence of Marking | Para. 9.19 | As applicable | | | | | |
| 12 | Mating/Unmating Forces | Para. 9.20 | ESCC 3401/002 | | | | | |
| 13 | High Temperature Storage | Para. 9.21 | Initial Measurements Low Level Contact Resistance | Table 2 Item 1 | Rcl | Record Values | | mΩ |
| | | | Final Measurements Low Level Contact Resistance Drift | Table 2 Item 1 | ΔRcl | - | 3 | mΩ |
| | | | Rated Current Contact Resistance | Table 2 Item 2 | Rcr | Table 2 Item 2 | | |
| | | | Contact Retention (in Insert) | Para. 4.3.4 of this spec. | - | ESCC 3401 Para. 9.17 | | |
| 14 | Corrosion | Para. 9.22 | Visual Examination | - | - | - | - | |
| 15 | Insert Retention (in Shell) | Para. 9.23 & Para. 4.3.6 of this spec. | ESCC 3401/002 | | | | | |
| 16 | Jackscrew Retention | Para. 9.24 & Para. 4.3.7 of this spec. | ESCC 3401/002 | | | | | |

| No. | ESCC Generic No. 3401 | | Measurements and Inspections | | Symbol | Limits | | Unit |
|-----|---------------------------------------|---|---------------------------------------|---------------------------|--------|----------------------|------|------|
| | Environmental and Endurance Tests (1) | Test Method and Conditions | Identification | Conditions | | Min. | Max. | |
| 17 | High Temperature Measurements | Para. 9.25 | ESCC 3401/002 | | | | | |
| 18 | Overload Test | Para. 9.26 | Rated Current Contact Resistance | Table 2 Item 2 | Rcr | Table 2 Item 2 | | |
| 19 | Maintenance Aging | Para. 9.27 | Visual Examination | - | - | - | - | |
| | | | Contact Retention | Para. 4.3.4 of this spec. | - | ESCC 3401 Para. 9.17 | | |
| | | | Contact Insertion & Withdrawal Forces | Para. 4.3.8 of this spec. | - | Para. 4.3.8 | | |
| 20 | Engage/Separation Forces | Para. 9.28 & Para. 4.3.9 of this spec. | Force | - | - | Para. 4.3.9 | | |
| 21 | Oversize Pin Exclusion | Para. 9.29 & Para. 4.3.10 of this spec. | | | | ESCC 3401 Para. 9.29 | | |
| 22 | Probe Damage | Para. 9.30 & Para. 4.3.11 of this spec. | Contact Separation Force | Para. 4.3.9 of this spec. | - | Para. 4.3.9 | | |
| 23 | Solderability | Para. 9.31 & Para. 4.3.12 of this spec. | Not applicable | | | | | |

NOTES:

1. The tests in this Table refer to either Chart IV or V and shall be used as applicable.

APPENDIX A**AGREED DEVIATIONS FOR C&K COMPONENTS (F)**

| Items Affected | Description of Deviations |
|--|---|
| Para. 4.2.2, Deviations from Final Production Tests (Chart II) | Para. 9.4, Contact Capability: 100% Contact Capability Test may be omitted provided that a 100% visual inspection of the contact and a 10% Contact Capability test are performed in accordance with the C&K PID requirements. The results of the Contact Capability test shall be considered for PDA. |