CONNECTORS, RF, COAXIAL, BLIND-MATE SLIDE-ON,

TYPE SMP, 50 OHMS, ADAPTERS AND CONNECTING PIECES

ESCC Detail Specification No. 3402/026

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DCR No.	CHANGE DESCRIPTION

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1. GENERAL

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics, test and inspection data for Connectors, RF, Coaxial, Blind-Mate Slide-On, Type SMP, 50 Ohms, Adapters and Connecting Pieces. It shall be read in conjunction with ESCC Generic Specification No. 3402, the requirements of which are supplemented herein.

1.2 COMPONENT TYPE VARIANTS AND RANGE OF COMPONENTS

A list of the connector type variants specified herein, which are covered by this specification, are scheduled in Table 1(a). The various physical, electrical, mechanical and other pertinent characteristics applicable to each type variant are given in Figure 2(c) at the end of this specification.

1.3 MAXIMUM RATINGS

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

1.4 PARAMETER DERATING INFORMATION

The derating information applicable to the connectors specified herein is shown in Figure 1.

1.5 PHYSICAL DIMENSIONS

The physical dimensions of the connectors specified herein are shown in Figures 2(a), 2(b) and 2(c).

2. APPLICABLE DOCUMENTS

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

(a) ESCC Generic Specification No. 3402, Connectors, RF, Coaxial.

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.

TABLE 1(a) – COMPONENT TYPE VARIANTS AND RANGE OF COMPONENTS

Variant Number	Description	Frequency Range	Weight Max (g)
01	SMP In-series Adapter, Female-to-Female, 6.45mm	DC to 40GHz	0.17
02	SMP In-series Adapter, Female-to-Female, 7mm	DC to 40GHz	0.2
03	SMP In-series Adapter, Female-to-Female, 8.2mm	DC to 40GHz	0.23
04	SMP In-series Adapter, Female-to-Female, 8.6mm	DC to 40GHz	0.3
05	SMP In-series Adapter, Female-to-Female, 9.9mm	DC to 40GHz	0.4
06	SMP In-series Adapter, Female-to-Female, 11.4mm	DC to 40GHz	0.43
07	SMP In-series Adapter, Female-to-Female, 12.59mm	DC to 26.5GHz	0.5
08	SMP In-series Adapter, Female-to-Female, 16.74mm	DC to 26.5GHz	0.63
09	SMP In-series Adapter, Female-to-Female, 19.5mm	DC to 26.5GHz	0.8
10	SMP In-series Adapter, Female-to-Female, 22.39mm	DC to 26.5GHz	0.9
11	SMP In-series Adapter, Female-to-Female, 23.8mm	DC to 26.5GHz	0.95
12	SMP In-series Adapter, Female-to-Female, 24.19mm	DC to 26.5GHz	1
13	SMP Bulkhead Receptacle without Centre Contact, Limited Detent	N/A	0.2

TABLE 1(a) (CONTINUED) – ELECTRICAL CHARACTERISTICS

Variant Number	Return Loss (dB)	Insertion Loss max (dB)	RF Leakage at 3GHz (dB)	Voltage Proof		Contact Resistance		Insulation Resistance min (MΩ)
				Voltage (Vrms)	Leakage Current max (mA)	Centre Contact max (mΩ)	Shell max (mΩ)	
01	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 23 12 to 18GHz: ≥ 15 18 to 40GHz: ≥ 12	0.08√f(GHz)	-67	500	2	6	2	5000
02	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 23 12 to 26GHz: ≥ 15 26 to 40GHz: ≥ 10	0.08√f(GHz)	-67	500	2	6	2	5000
03	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 20 12 to 26GHz: ≥ 15 26 to 40GHz: ≥ 13	0.08√f(GHz)	-67	500	2	6	2	5000
04	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 20 12 to 26GHz: ≥ 15 26 to 40GHz: ≥ 13	0.08√f(GHz)	-67	500	2	6	2	5000
05	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 20 12 to 26GHz: ≥ 15 26 to 40GHz: ≥ 13	0.08√f(GHz)	-67	500	2	6	2	5000
06	DC to 6GHz: ≥ 30 6 to 12GHz: ≥ 20 12 to 26GHz: ≥ 15 26 to 40GHz: ≥ 13	0.08√f(GHz)	-67	500	2	6	2	5000
07	DC to 4GHz: ≥30 4 to 18GHz: ≥20 18 to 26.5GHz: ≥15	0.08√f(GHz)	-67	500	2	6	2	5000
08	DC to 4GHz: ≥ 30 4 to 18GHz: ≥ 20 18 to 26.5GHz: ≥ 15	0.08√f(GHz)	-67	500	2	6	2	5000
09	DC to 4GHz: ≥ 30 4 to 18GHz: ≥ 20 18 to 26.5GHz: ≥ 15	0.08√f(GHz)	-67	500	2	6	2	5000
10	DC to 4GHz: ≥ 30 4 to 18GHz: ≥ 20 18 to 26.5GHz: ≥ 15	0.08√f(GHz)	-67	500	2	6	2	5000
11	DC to 4GHz: ≥ 30 4 to 18GHz: ≥ 20 18 to 26.5GHz: ≥ 15	0.08√f(GHz)	-67	500	2	6	2	5000
12	DC to 4GHz: ≥ 30 4 to 18GHz: ≥ 20 18 to 26.5GHz: ≥ 15	0.08√f(GHz)	-67	500	2	6	2	5000
13	N/A	N/A	N/A	N/A	N/A	N/A	7	N/A

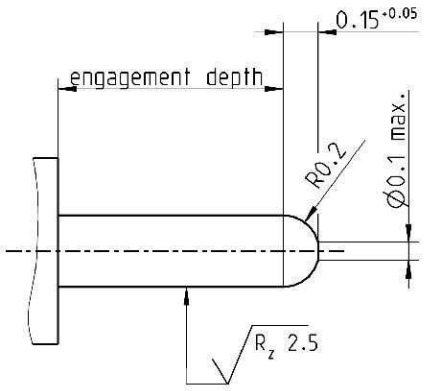
TABLE 1(a) (CONTINUED) – MECHANICAL AND OTHER CHARACTERISTICS

Variant Number	Contact Engagement and Separation Forces	Centre Contact Retention Force (axial) min (N)	Mating Force max (N)	Unmating Force min (N)	Residual Magnetism max (Gamma)	Hermeticity max (atm.cm³/s)	Leakage Applicability
01	Note 1	7	Note 2		20	N/A	N/A
02	Note 1	7	Note 2		20	N/A	N/A
03	Note 1	7	Note 2		20	N/A	N/A
04	Note 1	7	Note 2		20	N/A	N/A
05	Note 1	7	Note 2		20	N/A	N/A
06	Note 1	7	Note 2		20	N/A	N/A
07	Note 1	7	Note 2		20	N/A	N/A
08	Note 1	7	Note 2		20	N/A	N/A
09	Note 1	7	Note 2		20	N/A	N/A
10	Note 1	7	Note 2		20	N/A	N/A
11	Note 1	7	Note 2		20	N/A	N/A
12	Note 1	7	Note 2		20	N/A	N/A
13	N/A	N/A	45.4	9	N/A	N/A	N/A

NOTES:

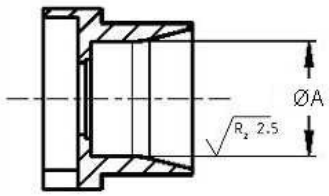
1. Test pins and test conditions are as follows:
   (a) Maximum Diameter Test Pin
   - Pin diameter: 0.408/0.412mm
   - Engagement depth: 1.2/1.3mm
   - Engagement force: 6N maximum

   (b) Minimum Diameter Test Pin
   - Pin diameter: 0.348/0.352mm
   - Separation depth: 1.2/1.3mm
   - Separation force: 0.1N minimum

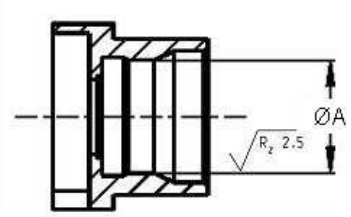


2. Applicable gauges:

Smooth Bore and Catcher's Mit



Limited Detent and Full Detent



	∅A of gauge (verifies ∅B of Female Interface)			
	Insertion -		Retention -	
	∅ (mm)	Force (N)	∅ (mm)	Force (N)
Smooth Bore or Catcher's Mit	3.124	≤ 9	3.225	≥ 2.2
Limited Detent	2.995	≤ 45	3.095	≥ 9
Full Detent	2.87	≤ 68	2.97	≥ 22

N.B.: The tolerance on all specified diameters (insertion and retention) is +0.005mm, -0mm.

TABLE 1(b) – MAXIMUM RATINGS

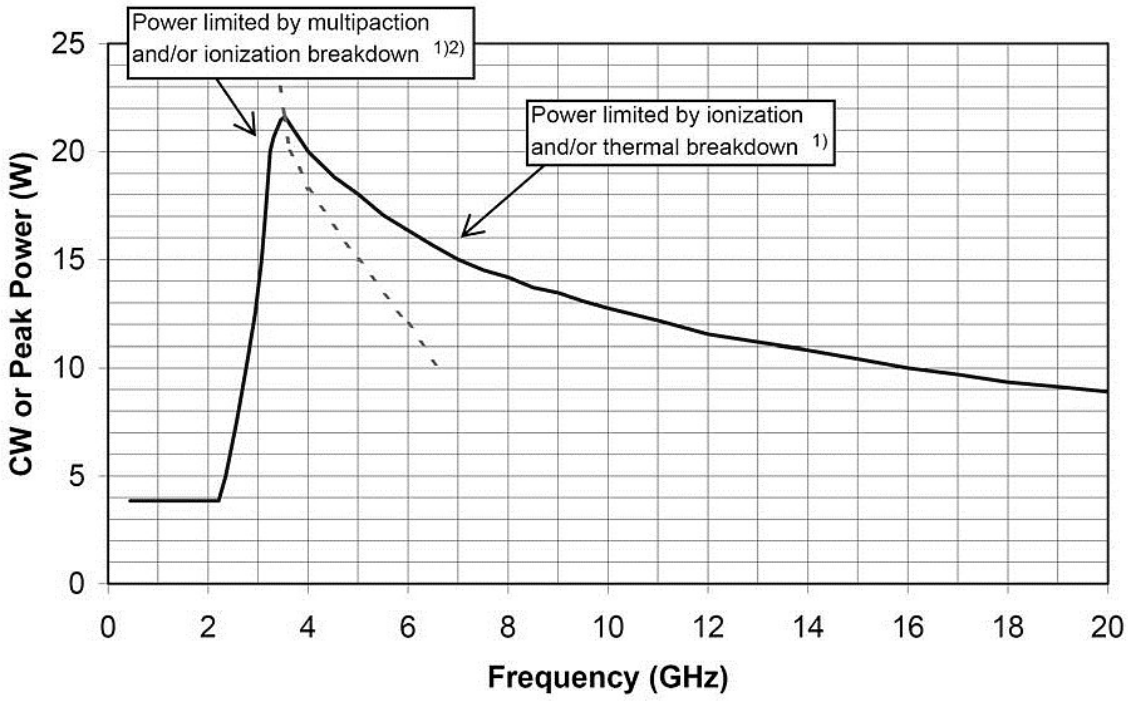
No.	Characteristics	Symbols	Maximum Ratings	Units	Remarks
1	Power	P	21.5	W	See Note 1
2	DC Power	P_{DC}		W	
	Variants 01 to 12		1000		T_{amb} ≤ +25°C See Figure 1(b)
	Variant 13		500		T_{amb} ≤ +70°C See Figure 1(c)
3	Impedance	Z	50	Ω	Nominal
4	Frequency Range	f	See Figure 2(c)	GHz	-
5	Operating Voltage	V_{op}	335	Vrms	-
6	Operating Temperature Range	T_{op}		°C	T_{amb}
	Variants 01 to 12		-65 to +155		
	Variant 13		-65 to +165		
7	Storage Temperature Range	T_{stg}		°C	-
	Variants 01 to 12		-65 to +155		
	Variant 13		-65 to +165		

NOTES:

1. Maximum Power (CW or peak) varies with frequency and it is limited by multipaction, ionization breakdown and thermal breakdown as shown in Figure 1(a). The maximum operating frequency is given in Figure 2(c).

FIGURE 1 – PARAMETER DERATING INFORMATION

Figure 1(a) – Maximum Power Handling in Space Vacuum, +25°C



1. Load VSWR is better than 1.30:1.

2. The part of the curve limited by multipaction takes into account a 6dB margin as recommended by ESA.

Figure 1(b) – Maximum DC Power versus Temperature, Variants 01 to 12

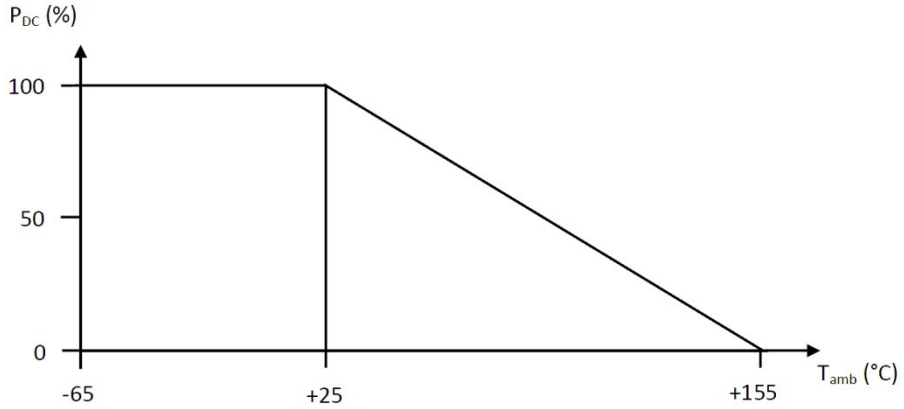


Figure 1(c) – Maximum DC Power versus Temperature, Variant 13

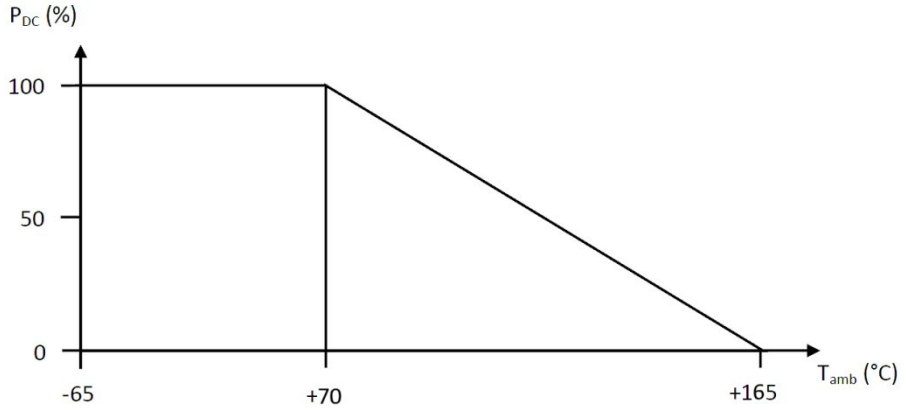
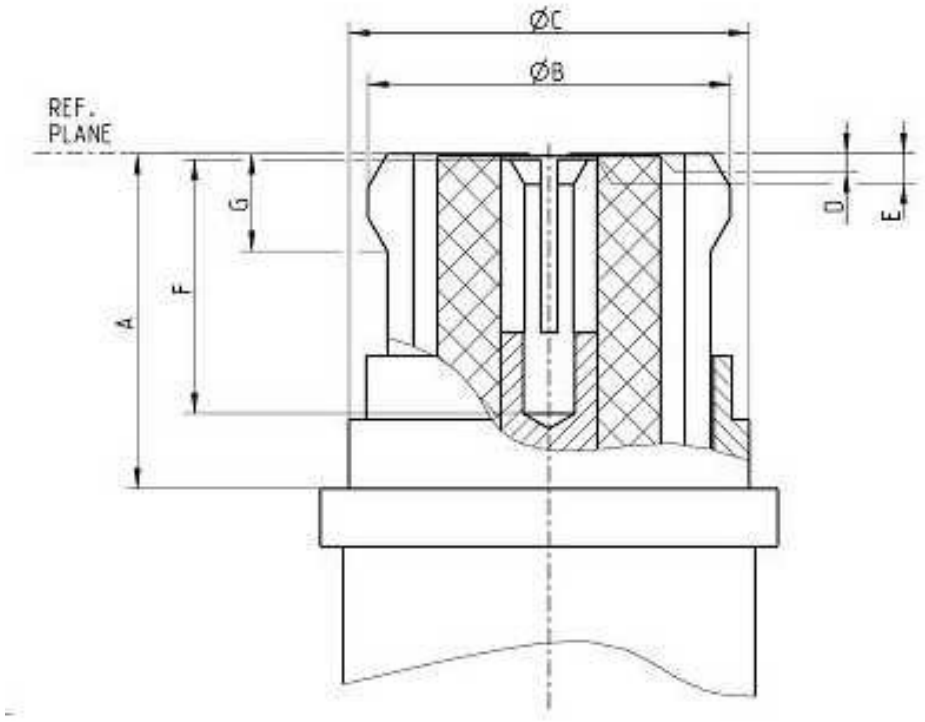


FIGURE 2 – PHYSICAL DIMENSIONS

FIGURE 2(a) – INTERFACE DIMENSIONS FOR ADAPTERS



Detail of Centre Contact:

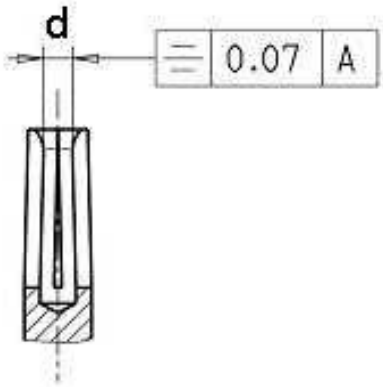


FIGURE 2(a) – INTERFACE DIMENSIONS FOR ADAPTERS (CONTINUED)

Symbols	Dimensions (mm)		Remarks
	Min	Max	
A	2.84	-	
∅B	Note 1		Not measured
∅C	3.47	3.51	
D	0	-	
E	0	0.2	
F	1.78	-	
G	0.46	0.64	
d	Note 2		

NOTES:

1. To meet the requirements of the Mating and Unmating Forces test defined in Table 1(a) herein, ∅B must be approximately equal to, but not exceed, 3.43mm.
2. Dimension d shall be as applicable to meet the requirements of the Contact Engagement and Separation Forces test defined in Para. 4.3.8.

FIGURE 2(b) – INTERFACE DIMENSIONS FOR BULKHEAD RECEPTACLE

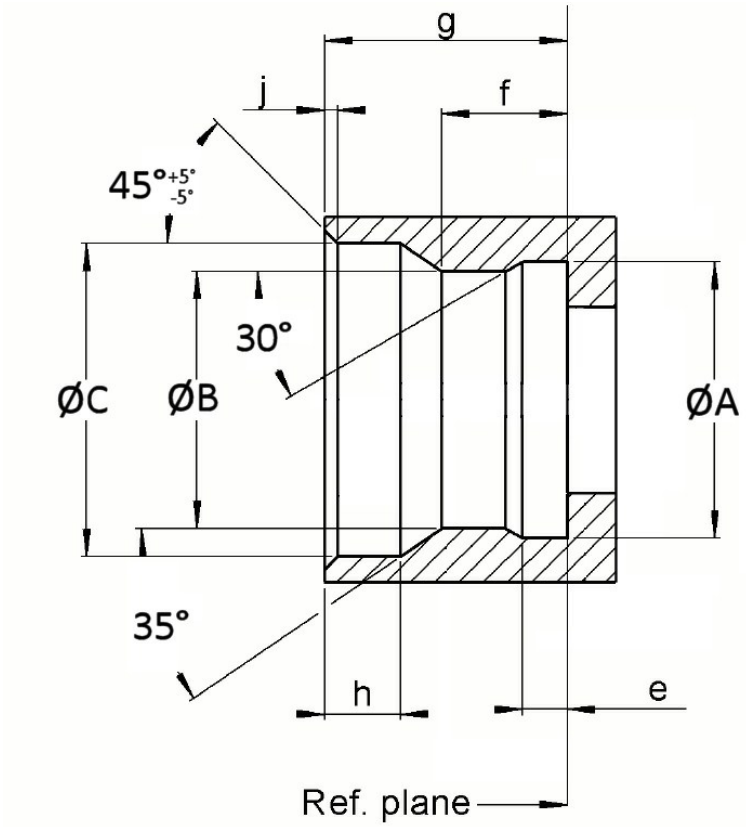


FIGURE 2(b) – INTERFACE DIMENSIONS FOR BULKHEAD RECEPTACLE (CONTINUED)

Symbols	Dimensions (mm)	
	Min	Max
∅A	3.15	3.2
∅B	3	3.1
∅C	3.53	3.68
e	0.52	0.6
f	1.37	1.52
g	2.74	2.84
h	0.84	0.94
j	0.08	0.2

4. REQUIREMENTS

4.1 GENERAL

The complete requirements for procurement of the components specified herein shall be as stated in this specification and ESCC Generic Specification No. 3402. Deviations from the Generic Specification, applicable to this specification only, are detailed in Para 4.2.

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 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

(a) Para. 5.2.1, Contact Engagement and Separation Forces: Not applicable to Variant 13.
(b) Para. 5.2.6, Solderability: Not applicable.

4.2.2 Deviations from Final Production Tests (Chart II)

(a) Para. 9.4, Coupling Proof Torque: Not applicable.
(b) Para. 9.6, Centre Contact Retention: The Torque test is not applicable and the Force (axial) test is not applicable to Variant 13.
(c) Para. 9.7, Seal Test: Not applicable.

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. 9.4, Coupling Proof Torque: Not applicable.
(b) Para. 9.7, Seal Test: Not applicable.
(c) Para. 9.14, Cable Retention Force: Not applicable.
(d) Para. 9.15, Cabling and Crimping Capability: Not applicable.
(e) Para. 9.17, Corona Level: Not applicable.
(f) Para. 9.21, Residual Magnetism: Not applicable to Variant 13.
(g) Para. 9.22, Soldering Proof: Not applicable.

4.2.5 Deviations from Lot Acceptance Tests (Chart V)

(a) Para. 9.4, Coupling Proof Torque: Not applicable.
(b) Para. 9.7, Seal Test: Not applicable.
(c) Para. 9.14, Cable Retention Force: Not applicable.
(d) Para. 9.15, Cabling and Crimping Capability: Not applicable.

4.3 MECHANICAL REQUIREMENTS

4.3.1 Dimension Check

The dimensions of the connectors specified herein shall be verified in accordance with the requirements set out in Para. 9.25 of ESCC Generic Specification No. 3402 and shall conform to those shown in Figures 2(a), 2(b) and 2(c) of this specification.

4.3.2 Weight

The maximum weight of the connectors specified herein shall be as specified in Figure 2(c).

4.3.3 Coupling Proof Torque

Not applicable (see Para. 4.2).

4.3.4 Cable Retention Force

Not applicable (see Para. 4.2).

4.3.5 Mating and Unmating Forces

The forces applied for the mating and unmating of the connectors shall conform to the values specified in Table 1(a).

4.3.6 Endurance

The applicable test requirements are specified in Section 9 of ESCC Generic Specification No. 3402. The number of cycles and the rate are as follows:

Paired with:	No. of Cycles for Qualification (Rate: ≤ 12 cycles/minute)	No. of Cycles for Lot Acceptance (Rate: ≤ 12 cycles/minute)
Smooth Bore / Catcher's Mit	> 1000	> 200
Limited Detent	> 500	> 100
Full Detent	> 100	> 20

4.3.7 Residual Magnetism

This test is not applicable to Variant 13. The applicable requirements are specified in Section 9 of ESCC Generic Specification No. 3402. The maximum permitted values of residual magnetism are specified in Table 1(a).

4.3.8 Contact Engagement and Separation Forces

This test is not applicable to Variant 13. The requirements for these measurements are specified in Section 9 of ESCC Generic Specification No. 3402. The conditions and limits are specified in Table 1(a).

4.3.9 Centre Contact Retention Force

This test is not applicable to Variant 13. The requirements for these measurements are specified in Section 9 of ESCC Generic Specification No. 3402. The test conditions are given in Figure 2(c). After testing, the dimensions of the connector interface shall be within the limits of Figure 2(a).

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 connectors 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

For Variants 01 to 12, shells shall be made of beryllium copper, with copper underplate (1.5µm minimum), electroless nickel underplate (2µm minimum) and gold plating (1.27µm minimum).

For Variant 13, the shell shall be made of passivated stainless steel.

4.4.2 Centre Contacts

For Variants 01 to 12, centre contacts shall be made of beryllium copper, with copper underplate (1.5µm minimum), electroless nickel underplate (2µm minimum) and gold plating (1.27µm minimum).

For Variant 13: Not applicable.

4.4.3 Inserts

For Variants 01 to 12, inserts shall be made of PTFE or Peek or LCP.

For Variant 13: Not applicable.

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 paragraphs. Each component shall be marked in respect of:

(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:

340202601B

- Detail Specification Number: 3402026
- Type Variant Number (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 at room temperature are scheduled in Table 2. Unless otherwise specified, measurements shall be performed at T_{amb} = +22±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.

TABLE 2 – ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE

No.	Characteristics	Symbols	Test Method and Conditions	Limits		Units
				Min	Max	
1	Insulation Resistance	R_i	ESCC 3402, Para. 9.1	Note 2		MΩ
2	Voltage Proof Leakage Current	I_L	ESCC 3402, Para 9.2 (Note 1)	Note 2		mA

NOTES:
1. The Voltage Proof voltage is given in Figure 2(c).
2. The limits are given in Table 1(a).

TABLES 3, 4 AND 5

Not applicable.

4.8 ENVIRONMENTAL AND ENDURANCE TESTS (CHARTS IV AND V OF ESCC GENERIC SPECIFICATION NO. 3402)

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, the measurements shall be performed at T_{amb} = +22±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 testing are scheduled in Table 6. Unless otherwise specified, the measurements shall be performed at T_{amb} = +22±3°C.

4.8.4 Conditions for Operating Life (Part of Endurance Testing) (Table 5)
Not applicable.

4.8.5 Electrical Circuit for Operating Life Test (Figure 5)
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. 3402. The conditions for high temperature storage testing shall be the maximum storage temperature specified in Table 1(b) of this specification.

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

No.	ESCC Generic Spec. No. 3402		Measurements And Inspections		Symbol	Limits		Unit
	Environmental and Endurance Tests Note 1	Test Method and Conditions	Identification	Conditions		Min	Max	
01	Coupling Proof Torque	Para 9.4	Not applicable					
02	Mating and Unmating Forces	Para. 9.5	**During Test** Mating and Unmating Forces	 Para. 9.5 of ESCC 3402	 -	 Table 1(a)		
03	Seal Test	Para. 9.7	Not applicable					
04	External Visual Inspection	Para. 9.8	External Visual Inspection	Para. 9.8 of ESCC 3402	-	-	-	-
05	Contact Resistance	Para. 9.9.2	**During Test** Contact Resistance	 Centre Contact (Note 2) Shell	 - -	 - -	 6 Fig. 2(c)	 mΩ mΩ
06	Vibration	Para. 9.10 Full Engagement	**During Test** Electrical Measurements **Final Measurements** Visual Examination Contact Resistance	**Last Cycle in Each Direction** No open or short circuits No evidence of damage Centre Contact (Note 2)	 - - -	 - - -	 - - 6	 - - mΩ
07	Shock	Para. 9.11 Full Engagement	**Final Measurements** Visual Examination Contact Resistance	 No evidence of damage Centre Contact (Note 2)	 - -	 - -	 - 6	 - mΩ
08	Rapid Change of Temperature	Para. 9.12	**Final Measurements** Contact Resistance Voltage Proof Leakage Current (Note 2) Visual Examination	**After a recovery period of 24±2hrs** Centre Contact (Note 2) Table 2 Item 2 -	 - I_L -	 - Table 2 Item 2 -	 6 -	 mΩ -
09	Climatic Sequence	Para. 9.13	**During Test** Voltage Proof (Note 2) **Final Measurements** External Visual Inspection Insulation Resistance (Note 2) Voltage Proof Leakage Current (Note 2)	**At Low Air Pressure** 0.1× value of Figure 2(b) **After final Damp Heat cycle** (within 1 to 24hrs recovery) Para. 9.8 of ESCC 3402 Table 2 Item 1 Table 2 Item 2	 VP - R_i I_L	 No flashover or breakdown - 5000 Table 2 Item 2	 - - 	 - MΩ
10	Cable Retention Force	Para. 9.14	Not applicable					

No.	ESCC Generic Spec. No. 3402		Measurements And Inspections		Symbol	Limits		Unit
	Environmental and Endurance Tests Note 1	Test Method and Conditions	Identification	Conditions		Min	Max	
11	Cabling and Crimping Capability	Para. 9.15	Not applicable					
12	VSWR or Reflection Coefficient (Note 2)	Para. 9.16	Return Loss	Para. 9.16 of ESCC 3402	-	Figure 2(c)		
13	Corona Level	Para. 9.17	Not applicable					
14	Endurance	Para. 9.18 and Para. 4.3.6 of this Spec.	**Final Measurements**					
			Mating and Unmating Forces	Para. 4.3.5 of this Spec.	-	Para. 4.3.5 of this Spec.		
			Contact Resistance	Centre Contact (Note 2)	-	-	6	mΩ
				Shell	-	-	Fig. 2(c)	mΩ
			Visual Examination	Para. 9.18 of ESCC 3402	-	-	-	-
15	RF Insertion Loss (Note 2)	Para. 9.19	Insertion Loss	Para. 9.19 of ESCC 3402	-	Figure 2(c)		
16	Corrosion	Para. 9.20	Visual Examination	Para. 9.20 of ESCC 3402: No exposure of base metal	-	-	-	-
17	Residual Magnetism (Note 2)	Para. 9.21	Magnetism	-	-	Para. 4.3.7 of this Spec.		
18	Soldering Proof	Para. 9.22	Not applicable					
19	RF Leakage (Note 2)	Para. 9.23	Leakage	-	-	Figure 2(c)		
20	High Temperature Storage	Para. 9.24 and Para. 4.8.6 of this Spec.	**Final Measurements**					
			Mating and Unmating Forces (Note 2)	Para. 4.3.5 of this Spec.	-	Para. 4.3.5 of this Spec.		
			Insulation Resistance (Note 2)	Table 2 Item 1	R_i	5000	-	MΩ
			Voltage Proof Leakage Current (Note 2)	Table 2 Item 2	I_L	Table 2 Item 2		
			Contact Retention (axial) (Note 2)	Para. 4.3.9 of this Spec.	-	Para. 4.3.9 of this Spec.		
			Visual Examination	-	-	-	-	-
			Contact Resistance	Centre Contact (Note 2)	-	-	6	mΩ
				Shell	-	-	Fig. 2(c)	mΩ
			External Visual Inspection	Para. 9.8 of ESCC 3402	-	-	-	-
21	Permanence of Marking	Para. 9.27	Marking Permanence	Para. 9.27 of ESCC 3402	-	-	-	-
22	Plating Thickness (Hermetic Types Only)	Para. 9.29	Not applicable					

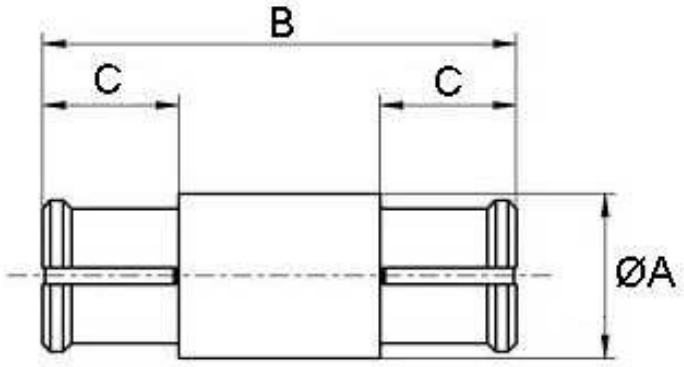
NOTES:

1. The tests in this Table refer to either Chart IV or V and shall be used as applicable.
2. Not applicable to Variant 13.

FIGURE 2 – PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2(c) – VARIANTS

Variants 01 to 12 – SMP In-series Adapter, Female-to-Female



Symbols	Dimensions mm		Remarks
	Min	Max	
∅A	3.33	3.43	All Variants
B	6.44	6.47	Variant 01
	6.99	7.02	Variant 02
	8.19	8.22	Variant 03
	8.59	8.62	Variant 04
	9.89	9.92	Variant 05
	11.39	11.42	Variant 06
	12.58	12.61	Variant 07
	16.73	16.76	Variant 08
	19.49	19.52	Variant 09
	22.38	22.41	Variant 10
	23.79	23.82	Variant 11
	24.18	24.21	Variant 12
C	2.75	2.95	Variants 01 to 06
	2.9	3.1	Variants 07 to 12

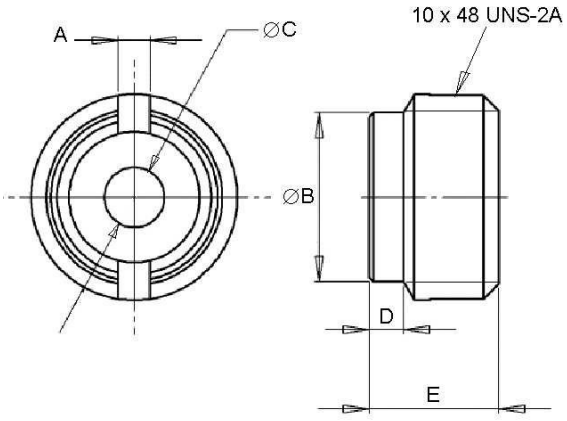
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		

MECHANICAL CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		

OTHER CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		

FIGURE 2(c) – VARIANTS (CONTINUED)

Variant 13 – SMP Bulkhead Receptacle without Centre Contact, Limited Detent



Symbols	Dimensions mm	
	Min	Max
A	0.7	0.8
∅B	3.9	4
∅C	1.43	1.47
D	0.75	-
E	2.97	3.07

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		

MECHANICAL CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		

OTHER CHARACTERISTICS	VALUES	UNITS
The characteristics, values and units are specified in Table 1(a)		