RF COAXIAL CONNECTORS, TYPE SSMA, ADAPTORS AND CONNECTING PIECES

ESCC Detail Specification No. 3402/006

Issue 2	January 2014

Document Custodian: European Space Agency – see https://escies.org

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DCR No.	CHANGE DESCRIPTION
826	Specification upissued to incorporate editorial changes per DCR.

TABLE OF CONTENTS

1 GENERAL

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics, test and inspection data for RF Coaxial Connectors, Type SSMA, Adaptors and Connecting Pieces. It shall be read in conjunction with ESCC Generic Specification No. 3402, the requirements of which are supplemented herein.

1.2 TYPE VARIANTS

A list of the type variants of the connectors specified herein, which are also covered by this specification, is given in Table 1(a).

For each type variant, the full electrical and physical characteristics are given in individual Figures 2(b) 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 as scheduled in Table 1(b).

1.4 PARAMETER DERATING INFORMATION (FIGURE 1)

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) and 2(b).

1.6 STANDARD TEST CONNECTOR INTERFACE

Whenever gauges are required for mating with the connectors under test, their physical dimensions shall be in accordance with those specified in Figure 3.

TABLE 1(a) – TYPE VARIANTS

Variant	Description
01	Straight Adaptor, Male - Male
02	Straight Adaptor, Male - Female
03	Straight Adaptor, Female - Female
08	T-Adaptor, Female - Female/Female

NOTES
1. The Variants are described in Figure 2(b).
2. For finishes, see Para. 4.4.

TABLE 1(b) - MAXIMUM RATINGS

No.	Characteristics	Symbol	Maximum Ratings	Unit	Remarks
1	Peak Power at +25°C	Pmax	1	kW	1µs max
2	Power	P	0.8	kW	See Figures 1(a) and 1(b)
3	Nominal Impedance	Z	50	Ω	-
4	Frequency Range	f	See Figure 2(b)	GHz	-
5	Voltage Rating	U_R	See Figure 2(b) (Voltage Proof)	Vrms	See Figure 1(c)
6	Operating Temperature Range	T_{op}	See Figure 2(b)	°C	-
7	Storage Temperature Range	T_{stg}	As per Operating Temperature Range	°C	-

FIGURE 1 - PARAMETER DERATING INFORMATION

FIGURE 1(a) - POWER VERSUS TEMPERATURE

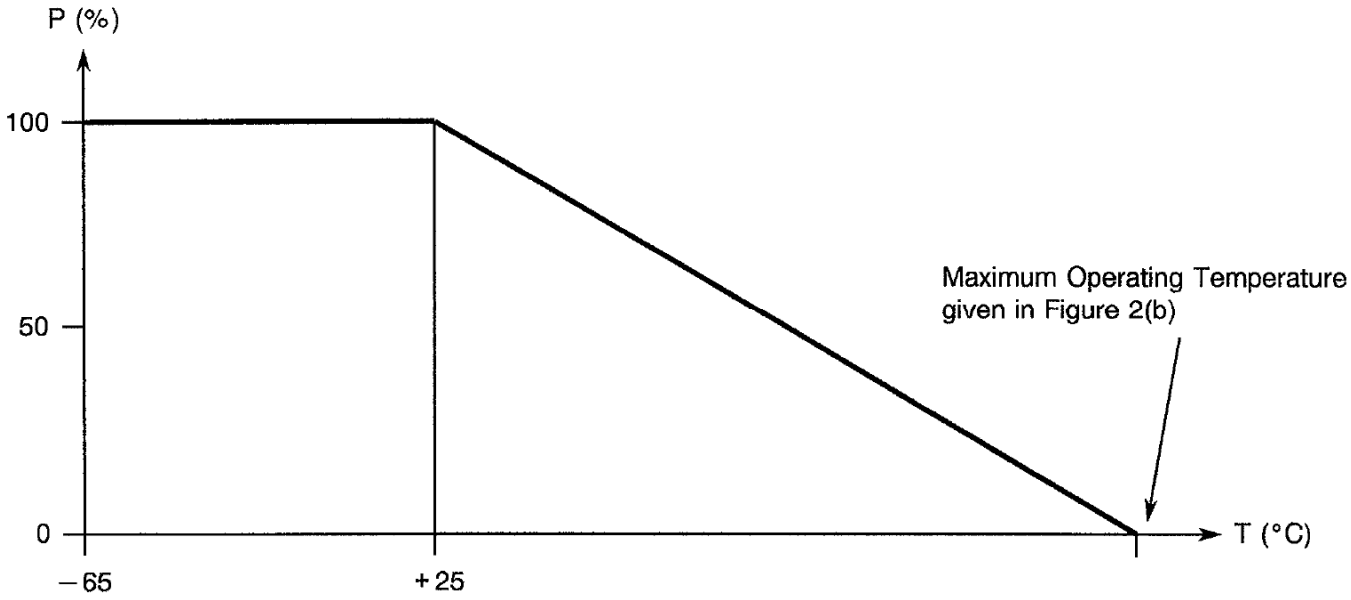
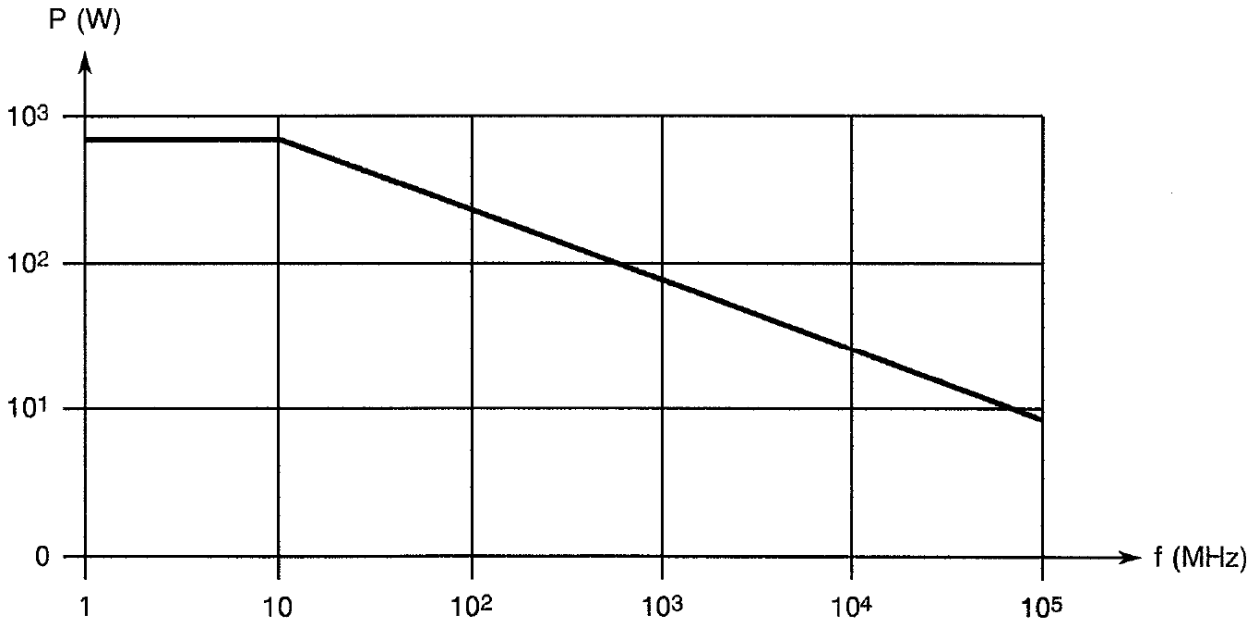


FIGURE 1(b) - POWER VERSUS FREQUENCY



POWER (VSWR in line 1) at T_{amb} = +40°C.

FIGURE 1 – PARAMETER DERATING INFORMATION (CONTINUED)

FIGURE 1(c) – VOLTAGE DERATING AT LOW AIR PRESSURE

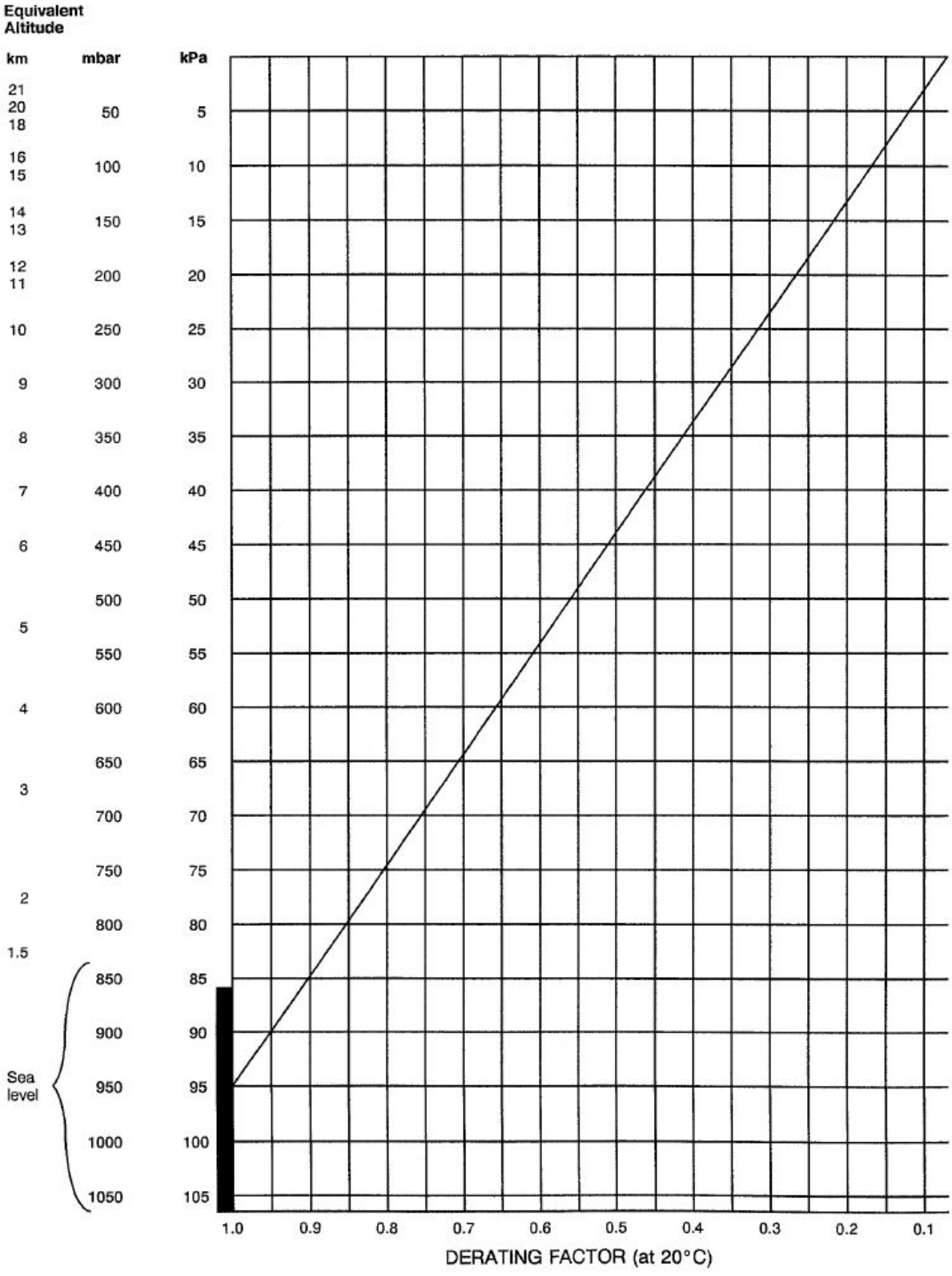
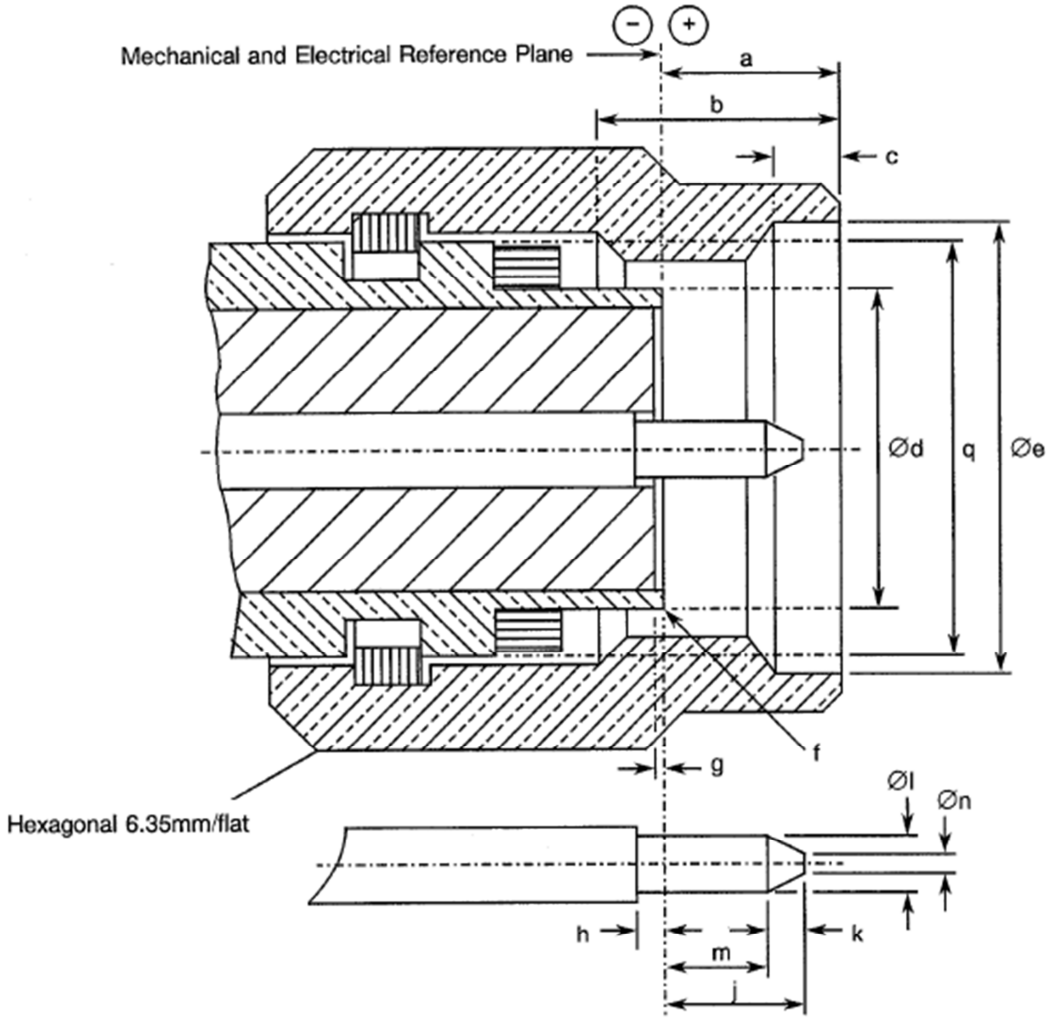


FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2(a) - CONNECTOR INTERFACE - MALE CONTACT

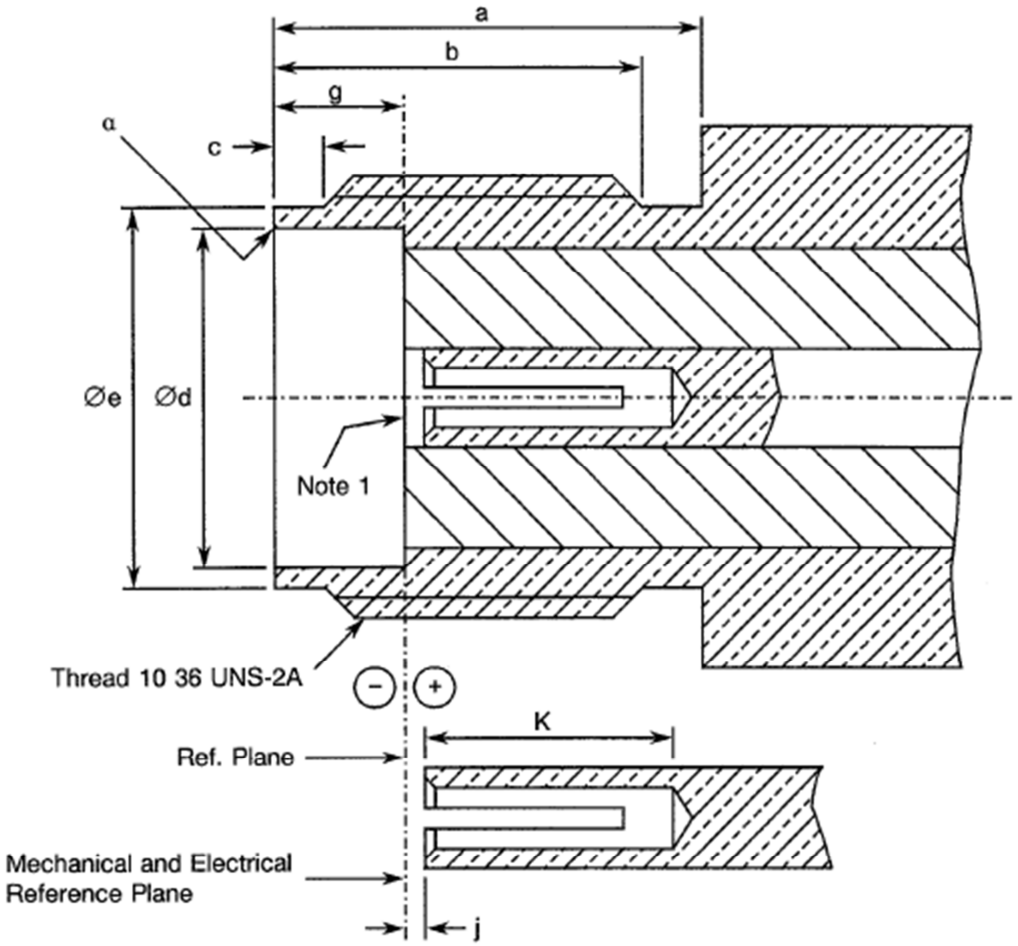


Symbol	Millimetres		Notes
	Min.	Max.	
a	-	3.43	
b	2.54	-	
c	0.38	1.14	
Ød	-	3.22	
Øe	4.98	-	
f	-	0.08	Radius or 45° chamfer
g	+0	-0.18	
h	0	-	
j	-	1.65	
k	0.2	-	
Øl	0.495	0.528	

Symbol	Millimetres		Notes
	Min.	Max.	
m	1	-	
Øn	-	0.25	
q	10-36 UNS 2B		Thread

FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2(a) - CONNECTOR INTERFACE - FEMALE CONTACT

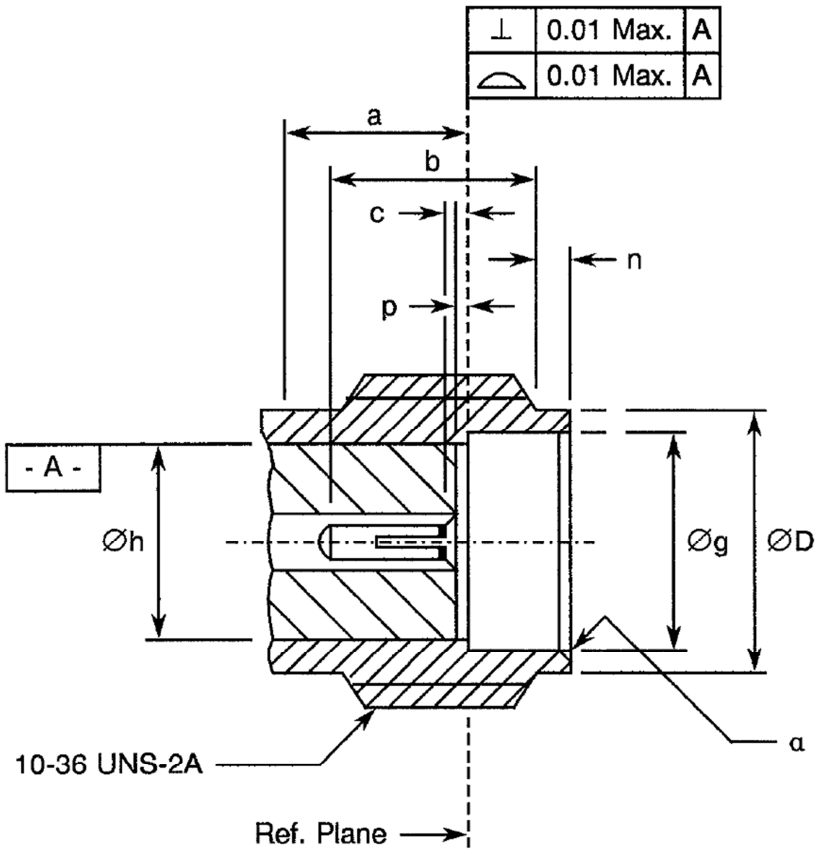


Symbol	Millimetres		Notes
	Min.	Max.	
a	3.56	-	
b	4.32	-	
c	0.38	1.14	
Ød	3.23	3.3	
Øe	3.89	4.06	
g	1.88	1.98	
j	0	0.41	
K	2.92	-	
α	-	0.13	45° Chamfer, no sharp edge

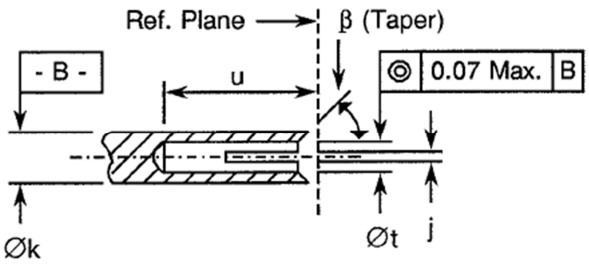
NOTES

1. Face position relative to reference plane shall be within the limits of +0mm to -0.18mm.

FIGURE 3 - STANDARD TEST CONNECTOR INTERFACE, FEMALE CONTACT



DETAIL OF INNER CONTACT

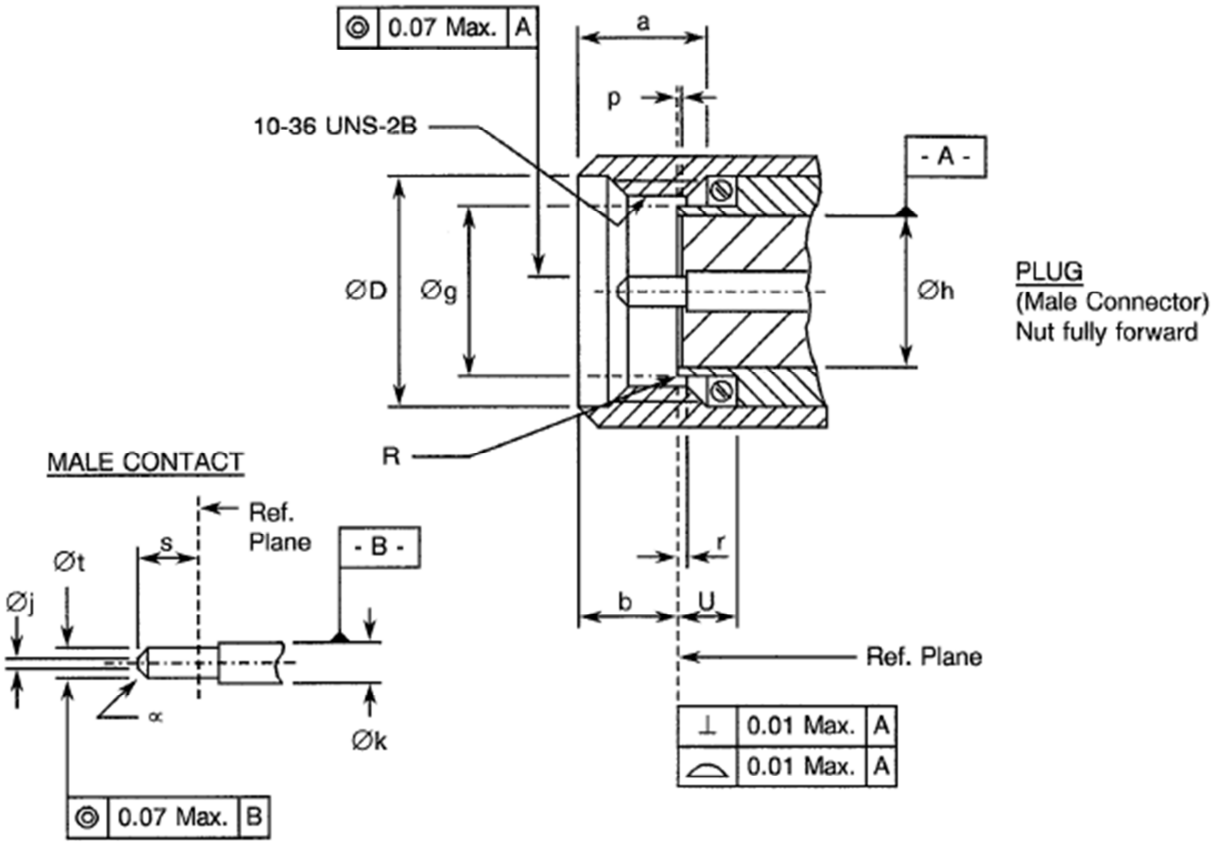


NOTES

1. Choose to give required performance.
2. Dimension to meet reflection factor requirement mating characteristics and conductor durability when mated with a 0.498/0.518Ø pin.

Symbol	Millimetres		Notes
	Min	Max	
a	3.89	-	
b	3.81	-	
c	0	0.076	Contact recess
ØD	3.89	4.04	
Øg	3.23	3.28	
Øh	2.79 NOM.		
j	0.15	0.2	4 slots
Øk			Note 1
n	0.38	1.14	
p	0	0.05	Insert recess
u	3.03	3.3	
Øt			Note 2
α	-	0.13	45° Chamfer
β			42/45° Chamfer

FIGURE 3 - STANDARD TEST CONNECTOR INTERFACE, MALE CONTACT



Symbol	Millimetres		Notes
	Min	Max	
a	2.54	4.32	
b	2.59	3.35	
ØD	5.05	5.21	
Øg	3.17	3.22	
Øh	2.79 NOM.		
Øj	-	0.25	Flat
Øk	-	-	Note 1
p	0	0.05	Insert recess
r	0	0.076	Contact recessed
R	-	0.08	Radius or chamfer
s	1.4	1.65	
Øt	0.498	0.518	
U	2.03	-	
α	-	-	45^{o} $\pm 3^{o}$ Chamfer

NOTES

1. Choose to give required performance.

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 for RF Coaxial Connectors.
(b) MIL-G-45204, Gold Plating, Electrodeposited.

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 connectors specified herein are stated in this specification and ESCC Generic Specification No. 3402. 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. 9.14, Cable Retention Force: Not applicable.
(b) Para. 9.15, Cabling and Crimping Capability: Not applicable.
(c) Para. 9.22, Soldering Proof: Not applicable.

4.2.5 Deviations from Lot Acceptance Tests (Chart V)

(a) Para. 9.14, Cable Retention Force: Not applicable.
(b) 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) and 2(b) of this specification.

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

4.3.3 Coupling Proof Torque
The requirements for testing of the coupling proof torque are specified in Section 9 of ESCC Generic Specification No. 3402. The applied torque shall be 110N.cm.

4.3.4 Cable Retention Force
Not applicable.

4.3.5 Mating and Unmating Forces
The applicable measurement requirements are specified in Section 9 of ESCC Generic Specification No. 3402. The maximum torque during mating and unmating shall not exceed 12N.cm.

Whenever a test is performed on mated pairs of connectors, the pairs shall be torqued at 60-80N.cm.

4.3.6 Endurance
The applicable test requirements are specified in Section 9 of ESCC Generic Specification No. 3402. The test conditions shall be as follows:

(a) Number of cycles: 500 for qualification; 100 for lot acceptance.
(b) Rate: 12 cycles maximum/minute.

4.3.7 Residual Magnetism
The applicable measurement requirements are specified in Section 9 of ESCC Generic Specification No. 3402.

4.3.7.1 Beryllium copper, copper underplate, gold-plated connectors.
The maximum allowable value shall not exceed 20 gammas.

4.3.7.2 Beryllium copper, nickel underplate, gold-plated connectors.
There are no requirements in respect of residual magnetism. This version is made such that the residual magnetism does not exceed 2000 gammas.

4.3.7.3 Stainless steel connectors
Residual magnetism is not applicable to stainless steel versions.

4.3.8 Contact Insertion and Withdrawal Forces
The requirements for these measurements are specified in Section 9 of ESCC Generic Specification No.3402 and apply to female contacts only.

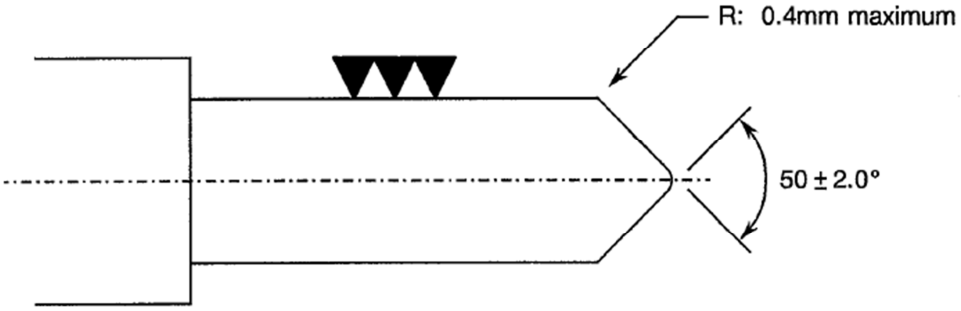
(a) Oversize Pin

Steel test pin diameter: 0.528/0.533 mm.
Insertion depth: 1.35 mm max.
Number of insertions: 3.

(b) Withdrawal Force Test (Minimum Diameter Test Pin)

Steel test pin diameter: 0.492/0.495 mm.
Insertion depth: 1.25 mm min.
Withdrawal force: 25g min.

FIGURE 4 - TEST PIN CONFIGURATION



4.3.9 Contact Retention

The requirements for this test are specified in Section 9 of ESCC Generic Specification No. 3402. The test conditions are given in Figure 2(b). After testing, the connector interface dimensions 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 Gold Plated Versions

4.4.1.1 Normal Types

(a) Shell, Coupling Nut, Centre Contact

Material	:	Beryllium copper.
Underplate	:	Nickel, 2µm minimum, or copper, 2.5µm minimum.
Plating	:	Gold, 2.5µm minimum, Class 2, Type 2 of MIL-G-45204.

(b) Inserts

Material	:	PTFE.
Baking conditions	:	10 cycles (-10, +55 °C). 1 cycle = 15 minutes minimum at each temperature with 5 minutes maximum transfer time.

(c) Gaskets

Material : Silicone rubber.

(d) Accessories (ferrule, crimping sleeve and nut)

Material	:	Brass.
Underplate	:	Nickel, 2µm minimum, or copper, 2.5µm minimum.
Plating	:	Gold, 2.5µm minimum, Class 2, Type 2 of MIL-G-45204.

4.4.1.2 Hermetic Types

Not applicable.

4.4.2 Stainless Steel Versions

Not applicable.

4.5 MARKING

4.5.1 General

The marking of components delivered to this specification shall be in accordance with the requirements of ESCC Basic Specification No. 21700 and the following paragraphs. When the component is too small to accommodate all of the marking specified, as much as space permits shall be marked and the marking information, in full, shall accompany the component in its primary package.

The information to be marked and the order of precedence, shall be as follows:

(a) The ESCC Component Number.
(b) Electrical Characteristics and Ratings.
(c) 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: 340200603B

– Detail Specification Number: 3402006
– Type Variant (see Table 1(a)): 03
– Testing Level (B or C, as applicable): B

4.5.3 Characteristics

Each component shall be marked in respect of:

(a) Type of plating/material.
(b) Subvariant.

The information shall be constituted and marked as follows:

Example: 101

– Plating/Material Type: 1
– Subvariant: 01

4.5.3.1 Type of Plating/Material

The type of plating/material shall be identified by means of the following codes:

Code	Type of Plating/Material	Para.
1	Gold plate, copper underplate	4.4.1
2	Gold plate, nickel underplate	4.4.1

4.5.3.2 Subvariants

Subvariants are identified by 2 digits and are specified where applicable in Figure 2(b). When no subvariant is shown, the 2 digits shall be '01'.

4.5.4 Traceability Information

Each component shall be marked in respect of traceability information 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, the measurements shall be performed at T_{amb} = +22 ±3 ^{o}C.

4.6.2 Electrical Measurements at High and Low Temperatures (Table 3)
Not applicable.

4.6.3 Circuits for Electrical Measurements
Not applicable.

4.7 BURN-IN TESTS (TABLES 4 AND 5)
Not applicable.

TABLE 2 - ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE

No.	Characteristics	Symbol	Spec. and/or test Method	Test Conditions	Limits		Unit
					Min.	Max.	
1	Insulation Resistance	Ri	ESCC 3402, Para. 9.1	500 Vdc	5000	-	MΩ
2	Voltage Proof	Vp	ESCC 3402, Para. 9.2	-	See Figure 2(b)		

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 tests are scheduled in Table 6 of this. specification. Unless otherwise stated, the measurements shall be performed at T_{amb} = +22 ±3 ^{o}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 are scheduled in Table 6 of this specification. Unless otherwise stated, the measurements shall be performed at T_{amb} = +22 ±3 ^{o}C.

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

4.8.5 Electrical Circuits for Operating Life Tests
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 shall be the maximum operating temperature as specified in Figure 2(b).

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

No.	ESCC Generic Spec. No. 3402		Measurements and Inspections		Symbol	Limits		Units
	Environmental and Endurance Tests (1)	Test Method and Conditions	Identification	Conditions		Min.	Max.	
01	Coupling Proof Torque	Para. 9.4	**Final Measurements**					
			Interface Dimensions	-	-	Figure 2(a)		-
			Visual Examination	Para 9.4 of ESCC 3402	-	-	-	-
02	Mating and Unmating Forces	Para. 9.5	**During Test**					
			Torque	Para. 4.3.5	-	-	12	N.cm
03	Seal Test	Para. 9.7	Hermeticity	If applicable	-	-	1.10^{-8}	cm^3/s
			Leakage	As applicable	-	No Bubbles		-
04	Contact Resistance	Para. 9.9 6V 10mA	**During Test**					
			Contact Resistance	Centre Contact	-	-	6.5	mΩ
				Shell	-	-	2	mΩ
				Hermetic Centre Contact	-	-	N/A	mΩ
05	Vibration	Para. 9.10 Full Engagement	**During Test**	**Last Cycle in each direction**				
			Electrical Measurements	No open or short circuits	-	-	-	-
			Final Measurements					
			Contact Resistance	Centre Contact (6V 10mA)	-	-	6.5	mΩ
			Visual Examination	No evidence of damage	-	-	-	-
06	Shock or Bump	Para. 9.11	**Final Measurements**					
			Contact Resistance	Centre Contact (6V 10mA)	-	-	6.5	mΩ
			Visual Examination	No evidence of damage	-	-	-	-
07	Rapid Change of Temperature	Para. 9.12	**Final Measurements**	**After a recovery period of 24 ±2hrs**				
			Contact Resistance	Centre Contact (6V 10mA)	-	-	6.5	mΩ
			Voltage Proof	Table 2 Item 2	Vp	Figure 2(b)		-
			Visual Examination	-	-	-	-	-

No.	ESCC Generic Spec. No. 3402		Measurements and Inspections		Symbol	Limits		Units
	Environmental and Endurance Tests (1)	Test Method and Conditions	Identification	Conditions		Min.	Max.	
08	Climatic Sequence	Para. 9.13	**During Test**	**At Low Air Pressure**				
			Voltage Proof	No flashover or breakdown				
			Final Measurements	**After Final Damp Heat cycle (within 1 to 24 hrs recovery)**				
			Insulation Resistance	Table 2 Item 1	Ri	200	-	MΩ
			Voltage Proof	Table 2 item 2	Vp	Figure 2(b)		
			External Visual Inspection	Para. 9.8 of ESCC 3402	-	-	-	-
09	Cable Retention Force	Para. 9.14 and Para. 4.3.4 of this spec	Not applicable	-	-	-	-	-
10	Cabling and Crimping Capability	Para. 9.15	Not applicable	-	-	-	-	-
11	VSWR or Reflection Coefficient	Para. 9.16	VSWR	Para. 9.16 of ESCC 3402	-	Figure 2(b)		-
12	Corona Level	Para. 9.17	Corona	Para. 9.17 of ESCC 3402	-	Figure 2(b)		-
13	Endurance	Para. 9.18 and Para. 4.3.6 of this spec.	**Final Measurements**					
			Mating/Unmating Forces	Para. 4.3.5	-	-	12	N.cm
			Contact Resistance	Centre Contact (6V 10mA)	-	-	9	mΩ
				Shell (6V 10mA)	-	-	3	mΩ
				Hermetic Centre Contact	-	-	N/A	-
			Visual Examination	Para. 9.18 of ESCC 3402		-	-	-
14	RF Insertion Loss	Para. 9.19	Insertion Loss	Para. 9.19 of ESCC 3402	-	Figure 2(b)		-
15	Corrosion	Para. 9.20	Visual Examination	Para. 9.20 of ESCC 3402 No exposure of base metal	-	-	-	-
16	Residual Magnetism	Para. 9.21	Magnetism	-	-	Para. 4.3.7		-
17	Soldering Proof	Para. 9.22	Not applicable	-	-	-	-	-
18	RF Leakage	Para. 9.23	Leakage	-	-	Figure 2(b)		-

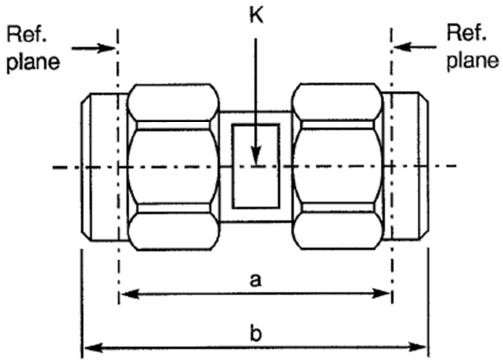
No.	ESCC Generic Spec. No. 3402		Measurements and Inspections		Symbol	Limits		Units
	Environmental and Endurance Tests (1)	Test Method and Conditions	Identification	Conditions		Min.	Max.	
19	High Temperature Storage	Para. 9.24 and Para. 4.8.6 of this spec.	**Final Measurements**					
			Mating/Unmating Forces	Para. 4.3.5	-	-	12	N.cm
			Insulation Resistance	Table 2 Item 1	Ri	5000	-	MΩ
			Voltage Proof	Table 2 item 2	Vp	Figure 2(b)		-
			Contact Retention	Para. 4.3.9	-	Para. 4.3.9		-
			Visual Examination	-	-	-	-	-
			Contact Resistance	Centre Contact	-	-	18	mΩ
				Shell	-	-	7.5	mΩ
				Hermetic Centre Contact	-	-	N/A	mΩ
			External Visual Inspection	Para. 9.8 of ESCC 3402	-	-	-	-

NOTES

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

FIGURE 2(b) – VARIANTS

VARIANT 01 - STRAIGHT ADAPTOR, MALE - MALE



Symbol	Millimetres		Notes
	Min.	Max.	
a	16.3 NOM.		
b	21.7 NOM.		
K	-	-	4 flats

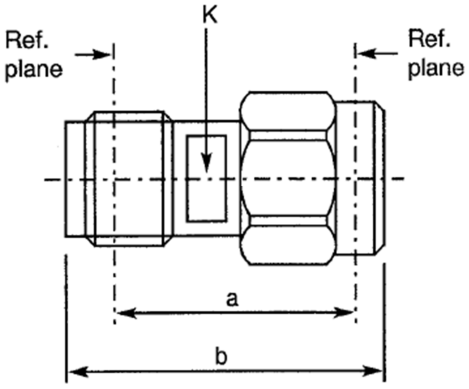
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.03 f (GHz)	
Maximum reflection coefficient	0.024 + 0.011 f (GHz)	
Maximum insertion loss	0.03 $\sqrt{f}$ (GHz)	dB
RF leakage	-[95 - f (GHz)]	dB
Voltage proof	750	Vrms
Corona level	Not applicable	Vrms

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Mini centre contact retention force (axial)	22	N
Mini centre contact retention torque	Not applicable	N.cm
Mini cable retention force	Not applicable	N
Mini cable retention torque value	Not applicable	N.cm
Maximum weight	3.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Rapid change of temperature - peak value	+115	^{o}C
Operating temperature range	-65 to +105	^{o}C
Maxi leakage (panel sealed connectors)	Not applicable	
Maxi leakage (hermetic sealed connector)	Not applicable	
Solderability	Not applicable	
Soldering proof	Not applicable	
Cables used	Not applicable	

FIGURE 2(b) – VARIANTS (CONTINUED)

VARIANT 02 - STRAIGHT ADAPTOR, MALE - FEMALE



Symbol	Millimetres		Notes
	Min.	Max.	
a	13.3 NOM.		
b	18 NOM.		
K	-	-	4 flats

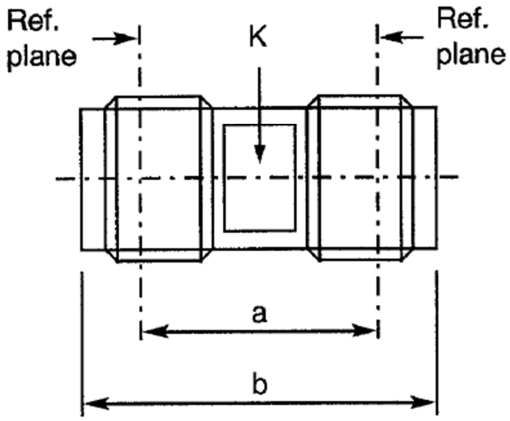
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.03 f (GHz)	
Maximum reflection coefficient	0.024 + 0.011 f (GHz)	
Maximum insertion loss	0.03 √f (GHz)	dB
RF leakage	-[95 - f (GHz)]	dB
Voltage proof	750	Vrms
Corona level	Not applicable	Vrms

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Mini centre contact retention force (axial)	22	N
Mini centre contact retention torque	Not applicable	N.cm
Mini cable retention force	Not applicable	N
Mini cable retention torque value	Not applicable	
Maximum weight	2.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Rapid change of temperature - peak value	+115	^{o}C
Operating temperature range	-65 to +105	^{o}C
Maxi leakage (panel sealed connectors)	Not applicable	
Maxi leakage (hermetic sealed connector)	Not applicable	
Solderability	Not applicable	
Soldering proof	Not applicable	
Cables used	Not applicable	

FIGURE 2(b) – VARIANTS (CONTINUED)

VARIANT 03 – STRAIGHT ADAPTOR, FEMALE - FEMALE



Symbol	Millimetres		Notes
	Min.	Max.	
a	11.7 NOM.		
b	15.5 NOM.		
K	-	-	4 flats

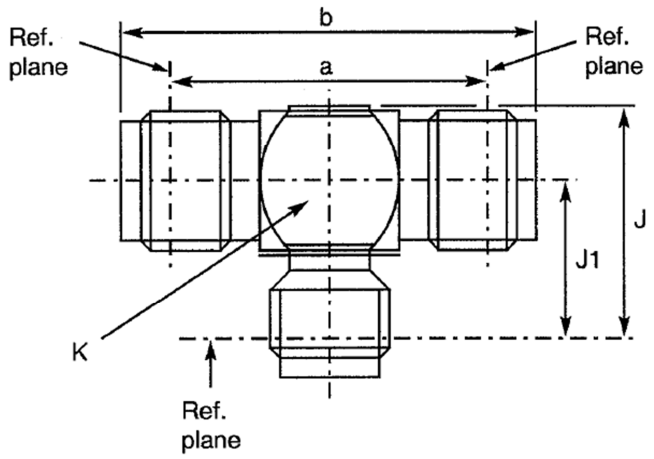
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.03 f (GHz)	
Maximum reflection coefficient	0.024 + 0.011 f (GHz)	
Maximum insertion loss	0.03 √f (GHz)	dB
RF leakage	- [95 - f (GHz)]	dB
Voltage proof	750	Vrms
Corona level	Not applicable	Vrms

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Mini centre contact retention force (axial)	22	N
Mini centre contact retention torque	Not applicable	N.cm
Mini cable retention force	Not applicable	N
Mini cable retention torque value	Not applicable	N.cm
Maximum weight	1.1	g

OTHER CHARACTERISTICS	VALUES	UNITS
Rapid change of temperature - peak value	+115	^{o}C
Operating temperature range	-65 to +105	^{o}C
Maxi leakage (panel sealed connectors)	Not applicable	
Maxi leakage (hermetic sealed connector)	Not applicable	
Solderability	Not applicable	
Soldering proof	Not applicable	
Cables used	Not applicable	

FIGURE 2(b) – VARIANTS (CONTINUED)

VARIANT 08 – T-ADAPTOR, FEMALE – FEMALE/FEMALE



Symbol	Millimetres		Notes
	Min.	Max.	
a	13.2 NOM.		
b	17 NOM.		
J	9 NOM.		
J1	6.6 NOM.		
K	-	-	4 flats, cube shape

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	Not applicable	
Maximum reflection coefficient	Not applicable	
Maximum insertion loss	Not applicable	dB
RF leakage (1)	- [100 - f (GHz)]	dB
Voltage proof	750	Vrms
Corona level	Not applicable	Vrms

NOTES

1. For information only.

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Mini centre contact retention force (axial)	22	N
Mini centre contact retention torque	Not applicable	N.cm
Mini cable retention force	Not applicable	N
Mini cable retention torque value	Not applicable	N.cm
Maximum weight	2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Rapid change of temperature - peak value	+200	^{o}C
Operating temperature range	-55 to +155	^{o}C
Maxi leakage (panel sealed connectors)	Not applicable	
Maxi leakage (hermetic sealed connector)	Not applicable	
Solderability	Not applicable	
Soldering proof	Not applicable	
Cables used	Not applicable	