RF COAXIAL CONNECTORS WITH MALE CONTACT

BASED ON TYPE SMA

ESCC Detail Specification No. 3402/001

Issue 4	November 2023

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DCR No.	CHANGE DESCRIPTION
1432	Specification updated to incorporate changes per DCR.

TABLE OF CONTENTS

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. 3402.

(b) MIL-STD-348, Department of Defence Interface Standard: Radio Frequency Connector Interfaces.

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:

(a) For components with a fixed configuration (see Paras. 1.4.2 and 3):

Example: 3402001012

Detail Specification Reference: 3402001

- Component Type Variant Number: 01 (as required)
- Characteristic code: Material/Plating (Type 2): 2 (as required)

(b) For components with a variable configuration where the rear contact and insert dimensions A and B shall be selected by the Orderer (see Paras. 1.4.2 and 3):

Example: 340200124213D00W02D50C

- Detail Specification Reference: 3402001
- Component Type Variant Number: 24 (as required)
- Characteristic code: Material/Plating (Type 2): 2 (as required)
- Characteristic code: Dimension A: Rear contact length (13mm): 13D00 (as required)
- Characteristic code: Dimension A tolerance (±0.05mm): W (as required)
- Characteristic code: Dimension B: Rear insert length (2.5mm): 02D50 (as required)
- Characteristic code: Dimension B tolerance (±0.25mm): C (as required)

1.4.1.1 Characteristics Codes

Characteristics to be codified as part of the ESCC Component Number (as applicable) shall be as follows:

(a) Material/Plating: Connector material and plating (see Para. 1.7) expressed by means of the following codes:

Material/Plating	Code
Beryllium Copper, Gold plated, Copper underplate (Type 1)	1
Beryllium Copper, Gold plated, Nickel underplate (Type 2)	2
Amagnetic Stainless Steel, Electro-passivated (Type 3)	3
Amagnetic Stainless Steel, Gold plated (Type 4)	4

(b) Dimension A and B: Rear contact and insert lengths (see Para. 3) expressed by the following codes. The unit quantity shall be mm:

Dimension A or B Length (mm)	Code
XX.XX	XXDXX

NOTES:

1. Dimension A shall always be greater than B. Both values shall always be positive.
2. When dimension B (insert) is flush with the flange (B = 0), the insert length shall be marked 00D00 with the appropriate tolerance.

(c) Dimension A and B tolerance: Tolerances on contact and insert lengths (see Para. 3) expressed by the following codes. The unit quantity shall be mm:

Dimension A or B Tolerance (mm)	Code
±0.05	W
±0.1	B
±0.25	C

1.4.2 Component Type Variants

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

Variant Number	Description (Notes 1, 2)	Configuration Type (Note 3)
01	Straight Plug, Solder-Type, for Semi-Rigid Cable Ø2.2mm (0.085”)	Fixed
02	Straight Plug, Solder-Type, for Semi-Rigid Cable Ø3.58mm (0.141”)	Fixed
03	Straight Plug with Cable Clamp, Solder-Type, for Semi-Rigid Cable Ø6.35mm (0.25”)	Fixed
04	Straight Plug with Cable Clamp, Solder-Type, for Semi-Rigid Microporous Cable Ø6.35mm (0.25”)	Fixed
05	Straight Plug, Crimp-Type	Fixed
06	Straight Plug, Crimp-Type, for 50 CIS Cable	Fixed
07	Straight Plug, Crimp- or Solder-Type, for Cable Ø5mm, Single Braid	Fixed
08	Straight Plug, Crimp- or Solder-Type, for Cable Ø5mm, Double Braid	Fixed
09	Right Angle Plug, Solder-Type, for Semi-Rigid Cable Ø2.2mm (0.085”)	Fixed

Variant Number	Description (Notes 1, 2)	Configuration Type (Note 3)
10	Right Angle Plug, Solder-Type, for Semi-Rigid Cable Ø3.58mm (0.141”)	Fixed
12	Right Angle Plug, Crimp-Type	Fixed
13	Right Angle Plug, Crimp-Type, for Cable Ø5mm, Single Braid	Fixed
14	Right Angle Plug, Crimp-Type, for Cable Ø5mm, Double Braid	Fixed
15	Square Flange Male Receptacle	Fixed
16	2-Hole Flange Male Receptacle	Fixed
17	Square Flange Male Receptacle	Fixed
18	Flange Male Receptacle, Triplate Launcher	Fixed
20	Flange Male Receptacle, Triplate Launcher	Fixed
21	Flange Male Receptacle, Triplate Launcher	Fixed
22	Square Flange Male Receptacle, Low RF Leakage	Fixed
24	Square Flange Male Receptacle, Low RF Leakage	Variable
25	Square Flange Male Receptacle	Fixed
26	Straight Plug, Crimp-Type	Fixed
27	Square Flange Male Receptacle (Note 4)	Variable
28	2-Hole Flange Male Receptacle (Note 4)	Variable
29	Straight Plug, Solder-Type, for SHF 5 Cable	Fixed
30	2-Hole Flange Male Receptacle	Fixed
32	2-Hole Flange Male Receptacle, with Hermetic Glass Seal Ø0.3mm and EMI Gasket	Fixed
33	2-Hole Flange Male Receptacle, with Hermetic Glass Seal Ø0.46mm and EMI Gasket	Fixed
34	Bulkhead Male Receptacle, with Hermetic Glass Seal Ø0.3mm	Fixed
35	Bulkhead Male Receptacle, with Hermetic Glass Seal Ø0.46mm	Fixed
36	Hermetic Bulkhead Male Receptacle, with Compression Gasket	Fixed
37	Straight Plug, Solder-Type, for SHF 3 Cable	Fixed
38	Straight Plug, Solder-Type, for SHF 8 Cable	Fixed
39	Right Angle Plug, Solder-Type, for SHF 3 Cable	Fixed
40	Right Angle Plug, Solder-Type, for SHF 5 Cable	Fixed
43	Elbow Plug, Solder-Type, for SHF 8 Cable	Fixed
44	Right Angle Plug, Crimp-Type, for 50 CIS Cable (Note 4)	Fixed
45	Square Flange Male Receptacle (Maximum Operating Temperature = +165°C) (Note 4)	Variable
46	2-Hole Flange Male Receptacle (Maximum Operating Temperature = +165°C) (Note 4)	Variable
47	Right Angle Plug, Crimp-Type, for 50 CIS Cable (Maximum Operating Temperature = +165°C) (Note 4)	Fixed

NOTES:

1. See Para. 3 for details.
2. For available connector materials and finishes, see Paras. 1.4.1.1(a) and 1.7.
3. See Paras. 1.4.1, 1.4.1.1(b), 1.4.1.1(c) and 3.
4. Variants 45, 46 and 47 are high temperature capability versions of Variants 27, 28 and 44 respectively.

1.5 MAXIMUM RATINGS

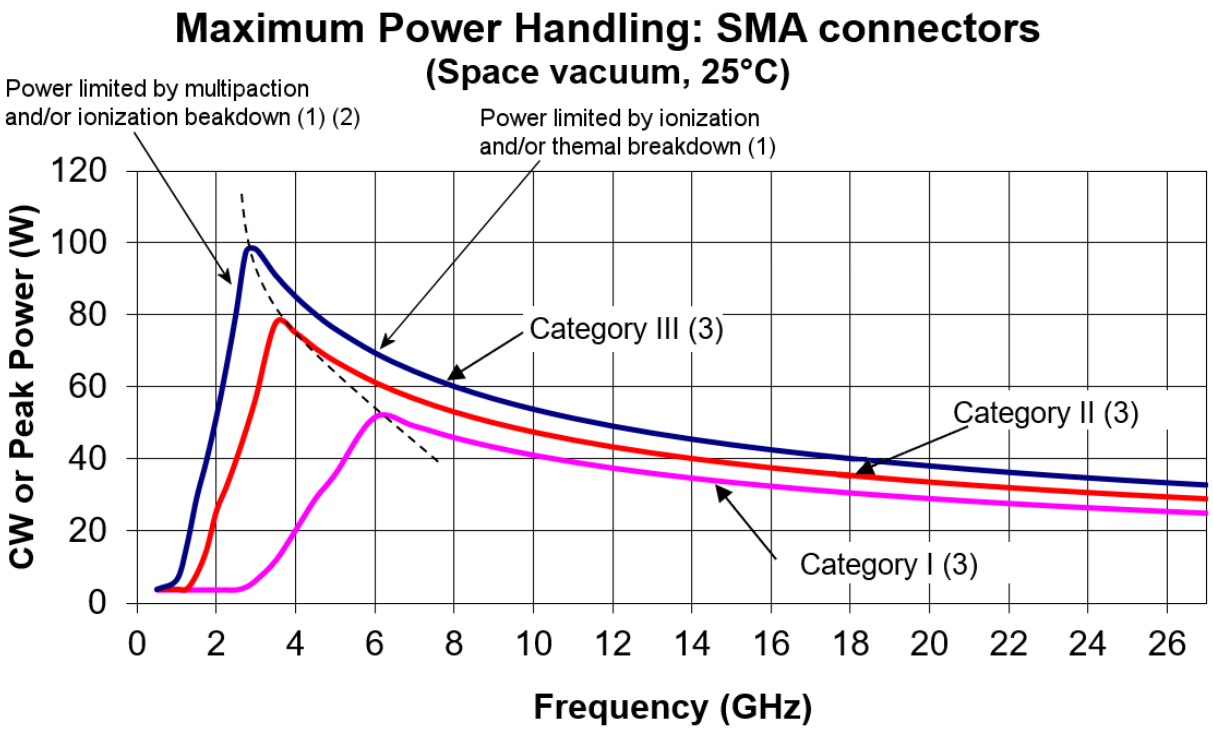
The maximum ratings shall not be exceeded at any time during use or storage.

Maximum ratings shall only be exceeded during testing to the extent specified in this specification and when stipulated in Test Methods and Procedures of the ESCC Generic Specification.

Characteristics	Symbol	Maximum Ratings	Unit	Remarks
Power	P	See Para. 3		Notes 1, 2
Nominal Impedance	Z	50	Ω	-
Operating Frequency Range	f	See Para. 3	GHz	Note 1
Operating Voltage	V_{op}	335	Vrms	-
Operating Temperature Range	T_{op}	See Para. 3	°C	-
Storage Temperature Range	T_{stg}	As per T_{op}	°C	-
Soldering Temperature	T_{sol}	260	°C	Duration 10s maximum See Para. 3
Coupling Nut Torque (Coupling Proof Torque)	Tq	170	N.cm	See Note 3 for nominal coupling torque

NOTES:

1. Derate Power with respect to Operating Frequency as follows:



The following details apply:

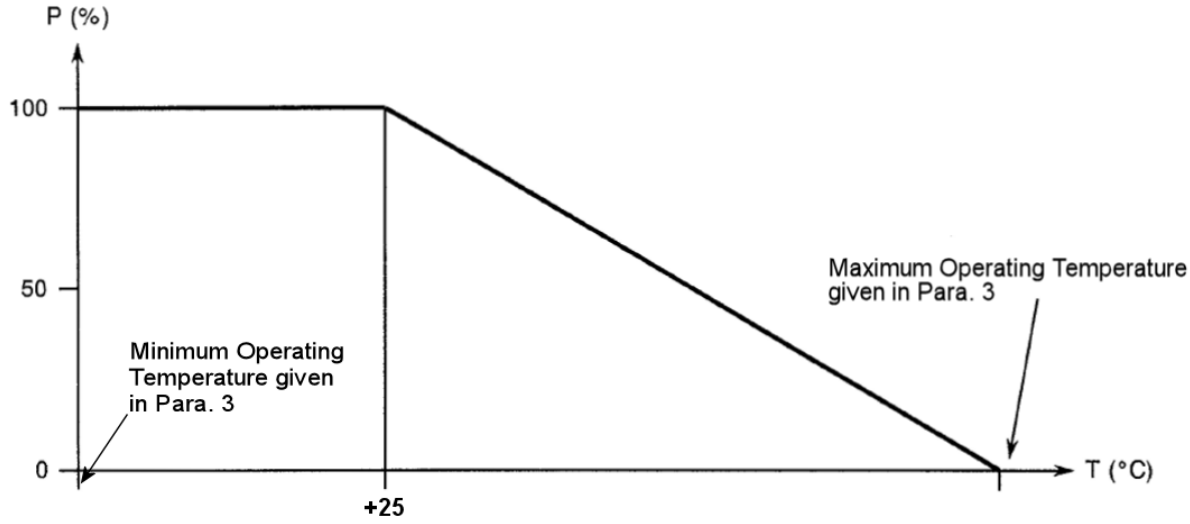
a) Load VSWR is better than 1.3:1.

b) The part of the curve limited by multipaction takes into account a 6dB margin.

c) See Para. 3 for applicability of power handling categories to the different variants.

d) These power handling curves have been constructed using the ESCC Multipactor Tool v1.0.

2. Derate Power with respect to Operating Temperature as follows:



3. Whenever a test is performed on mated pairs of connectors, the pairs shall be torqued at 100 ±20N.cm.

1.6 PHYSICAL DIMENSIONS (SEE ALSO PARA. 3)

1.6.1 Connector Interface Dimensions and Connector Interface Gauge Dimensions

(a) SMA Male Connector Interface: compatible with series SMA pin contact interface as specified in MIL-STD-348.

(b) SMA Female Gauge Interface: compatible with series SMA socket contact test connector interface as specified in MIL-STD-348.

1.7 MATERIALS AND FINISHES

Materials and finishes shall be as follows (as applicable, see Paras. 1.4.1.1(a) and 3):

1.7.1 Type 1

(a) Shell, Coupling Nut: beryllium copper, plated gold 2.5µm minimum over copper 2.5µm minimum.

(b) Centre Contact: beryllium copper or brass, plated gold 2.5µm minimum over copper 2.5µm minimum.

(c) Insulator: PTFE.

(d) Gaskets:
- Front: silicone.
- EMI: conductive silicone loaded silver.
- Compression: aluminium with surface treatment.

(e) Crimping and soldering elements: brass or copper, plated gold 2.5µm minimum over copper 2.5µm minimum.

(f) Rear Nut: brass or copper, plated gold 2.5µm minimum over copper 2.5µm minimum.

(g) Hermetic Glass Seal:
- Shell, Centre Contact: iron-nickel alloy, plated gold 1.27µm minimum over nickel 2µm minimum.
- Insulator: glass.

1.7.2 Type 2

(a) Shell, Coupling Nut: beryllium copper, plated gold 1.27µm minimum over nickel 2µm minimum.

(b) Centre Contact: beryllium copper or brass, plated gold 1.27µm minimum over nickel 2µm minimum.

(c) Insulator: PTFE.

(d) Gaskets:
- Front: silicone.
- EMI: conductive silicone loaded silver.
- Compression: aluminium with surface treatment.

(e) Crimping and soldering elements: brass or copper, plated gold 0.5µm minimum over nickel 2µm minimum.

(f) Rear Nut: brass or copper, plated gold 0.5µm minimum over nickel 2µm minimum.

(g) Hermetic Glass Seal:
- Shell, Centre Contact: iron-nickel alloy, plated gold 1.27µm minimum over nickel 2µm minimum.
- Insulator: glass.

1.7.3 Type 3

(a) Shell, Coupling Nut: amagnetic stainless steel, electro-passivated.

NOTE: For solder-type connectors, the rear part of the shell shall be plated gold 1.27µm minimum over nickel 2µm minimum.

(b) Centre Contact: beryllium copper or brass, plated gold 1.27µm minimum over nickel 2µm minimum.

(c) Insulator: PTFE.

(d) Gaskets:
- Front: silicone.
- EMI: conductive silicone loaded silver.
- Compression: aluminium with surface treatment.

(e) Crimping elements: brass or copper, plated nickel 2µm minimum.

(f) Soldering elements: brass or copper, plated gold 0.5µm minimum over nickel 2µm minimum.

(g) Rear Nut: amagnetic stainless steel, electro-passivated.

(h) Hermetic Glass Seal:
- Shell, Centre Contact: iron-nickel alloy, plated gold 1.27µm minimum over nickel 2µm minimum.
- Insulator: glass

1.7.4 Type 4

(a) Shell, Coupling Nut: amagnetic stainless steel, plated gold 1.27µm minimum over nickel 2µm minimum.

(b) Centre Contact: beryllium copper or brass, plated gold 1.27µm minimum over nickel 2µm minimum.

(c) Insulator: PTFE.

(d) Gaskets:
- Front: silicone.
- EMI: conductive silicone loaded silver.
- Compression: aluminium with surface treatment.

(e) Crimping and soldering elements: brass or copper, plated gold 0.5µm minimum over nickel 2µm minimum.

(f) Rear Nut: amagnetic stainless steel, plated gold 0.5µm minimum over nickel 2µm minimum.

(g) Hermetic Glass Seal:
- Shell, Centre Contact: iron-nickel alloy, plated gold 1.27µm minimum over nickel 2µm minimum.
- Insulator: Glass

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

None.

2.2 MARKING

The marking shall be in accordance with the requirements of ESCC Basic Specification No. 21700 and as follows.

The information to be marked on the component or the primary package shall be:

(a) The ESCC qualified components symbol (for ESCC qualified components only).

(b) The ESCC Component Number (see Para. 1.4.1).

(c) Traceability information.

2.3 ENVIRONMENTAL AND MECHANICAL TESTS

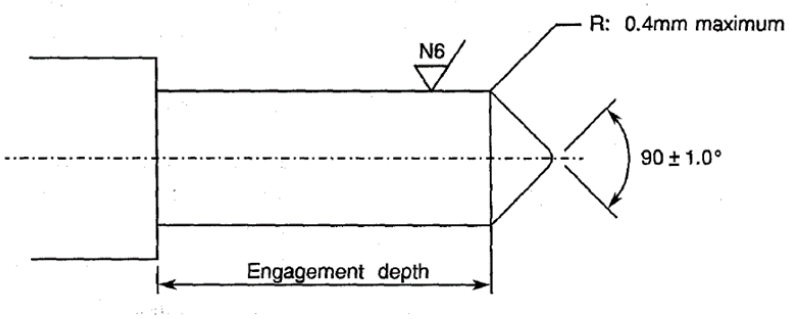
The following requirements apply to tests performed on the connector (and contact) lot as specified in the ESCC Generic Specification:

(a) Contact Engagement and Separation Forces:

	Oversize Test Pin Test	Maximum Diameter Test Pin Test	Minimum Diameter Test Pin Test
Test Pin Diameter (mm) (1)	0.9525 to 0.955	0.94 to 0.942	0.902 to 0.904
Engagement Depth (mm) (1)	0.76 to 1.14	1.27 to 1.91	1.27 to 1.91
Engagement Force (N)	-	13.34 maximum	-
Separation Force (N)	-	-	0.28 minimum

NOTES:

1. Test Pins details:



(b) Coupling Proof Torque: See Para. 1.5.

(c) Mating and Unmating Forces: Maximum torque: 24N.cm.

(d) Centre Contact Retention: See Para. 3.

(e) Seal: See Para. 3.

2.4 ROOM TEMPERATURE ELECTRICAL MEASUREMENTS (NOTE 1)

The measurements shall be performed at T_{amb} = +22 ±3°C.

Characteristics	Symbols	Test Method and Conditions	Limits		Units
			Min	Max	
Insulation Resistance	R_I	ESCC No. 3402	5	-	GΩ
Voltage Proof Leakage Current (Voltage Proof)	I_L	ESCC No. 3402 See Para. 3 Note 2	-	2	mA

NOTES:

1. For Variants that are delivered with the centre contact and insulator not mounted in the connector, measurements shall not be performed during Chart F3; see Para. 3.
2. Between centre contact and shell.

2.5 INTERMEDIATE AND END-POINT ELECTRICAL MEASUREMENTS

Unless otherwise specified, the measurements shall be performed at T_{amb} = +22 ±3°C.

Unless otherwise specified, the test methods and test conditions shall be as per the corresponding test defined in Para. 2.4 Room Temperature Electrical Measurements.

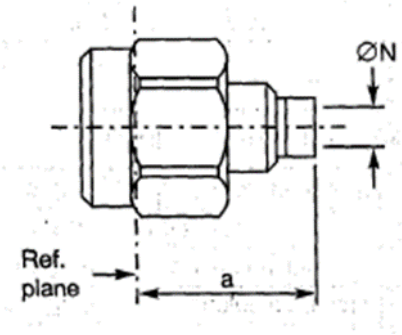
Test Reference per ESCC No. 3402	Characteristics and Test Conditions Ref. ESCC No. 3402	Symbols	Limits		Units
			Min	Max	
Random Vibration	Contact Resistance: I_T = 10mA, V_T = 6V				
	Centre Contact:	R_{ctc}	-	3	mΩ
	Hermetic Glass Seal: Centre Contact:	R_{hgs}	-	12	mΩ
Mechanical Shock	Contact Resistance: I_T = 10mA, V_T = 6V				
	Centre Contact:	R_{ctc}	-	3	mΩ
	Hermetic Glass Seal: Centre Contact:	R_{hgs}	-	12	mΩ
Temperature Cycling	Contact Resistance: I_T = 10mA, V_T = 6V				
	Centre Contact:	R_{ctc}	-	3	mΩ
	Hermetic Glass Seal: Centre Contact:	R_{hgs}	-	12	mΩ
	Voltage Proof Leakage Current:	I_L	Note 1		
Electrical Measurements at Room Temperature	Insulation Resistance:	R_I	Note 1		
	Voltage Proof Leakage Current:	I_L	Note 1		
	Contact Resistance: I_T = 10mA, V_T = 6V				
	Centre contact:	R_{ctc}	-	3	mΩ
	Shell:	R_{cts}	-	2	mΩ
	Hermetic Glass Seal: Centre Contact:	R_{hgs}	-	12	mΩ
	VSWR (Note 3):	VSWR	Note 2		
	Insertion Loss:	LI	Note 2		
Endurance	Contact Resistance: I_T = 10mA, V_T = 6V				
	Centre Contact:	R_{ctc}	-	4	mΩ
	Shell:	R_{cts}	-	3	mΩ
	Hermetic Glass Seal: Centre Contact:	R_{hgs}	-	12	mΩ

NOTES:

1. As specified in Para. 2.4.
2. As specified in Para. 3.
3. Measured with suitable low level RF power applied.

3 COMPONENT TYPE VARIANTS – DETAIL REQUIREMENTS

3.1 VARIANT 01 – STRAIGHT PLUG, SOLDER-TYPE, FOR SEMI-RIGID CABLE Ø2.2mm (0.085")



Symbol	Dimensions mm	
	Min	Max
a	8.4	8.7
ØN	2.25	2.35

NOTES:
1. Removable coupling nut.
2. Components are delivered with the coupling nut, centre contact and insulator not mounted in the connector.

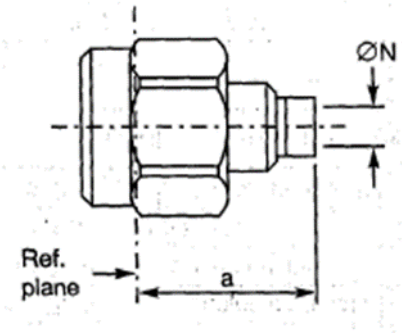
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.07 + 0.008 f (GHz)	
Maximum insertion loss	0.02 + 0.02 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 3)	-100 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	2.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 4)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 4)	KS 1, RG 405/U, (Ø2.2mm)	

NOTES:
3. For information purposes only.
4. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.2 VARIANT 02 - STRAIGHT PLUG, SOLDER-TYPE, FOR SEMI-RIGID CABLE Ø3.58mm (0.141")



Symbol	Dimensions mm	
	Min	Max
a	8.4	8.7
ØN	3.65	3.75

NOTES:
1. Removable coupling nut.
2. Components are delivered with the coupling nut, centre contact and insulator not mounted in the connector.

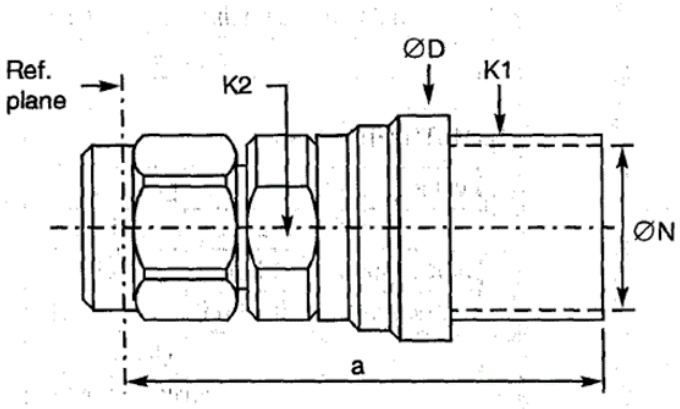
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.004 f (GHz)	
Maximum insertion loss	0.02 + 0.02 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 3)	-100 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	2.4	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 4)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 4)	KS 2, RG 402/U, (Ø3.58mm)	

NOTES:
3. For information purposes only.
4. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.3 VARIANT 03 - STRAIGHT PLUG WITH CABLE CLAMP, SOLDER-TYPE, FOR SEMI-RIGID CABLE Ø6.35mm (0.25")



Symbol	Dimensions mm		Notes
	Min	Max	
a	21.5	22.5	
ØD	10.9	11	
K1	-	10	2 flats
K2	-	8	2 flats
ØN	6.45	6.7	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.015 f (GHz)	
Maximum insertion loss	0.02 + 0.02 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

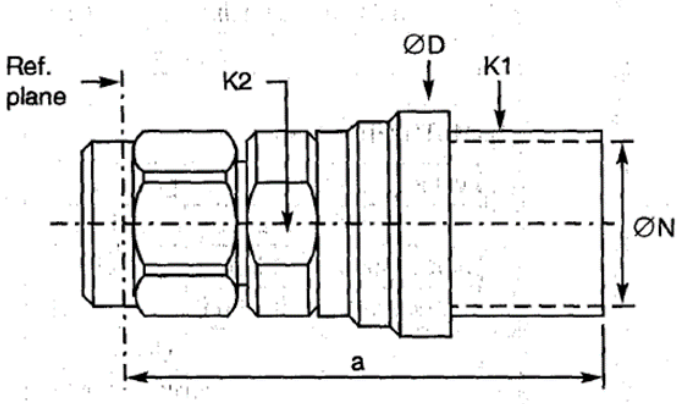
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	9.4	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	KS 3, RG 401/U, (Ø6.35mm)	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.4 VARIANT 04 - STRAIGHT PLUG WITH CABLE CLAMP, SOLDER-TYPE, FOR SEMI-RIGID MICROPOROUS CABLE Ø6.35mm (0.25")



Symbol	Dimensions mm		Notes
	Min	Max	
a	-	22.5	
ØD	10.9	11.1	
K1	-	10	2 flats
K2	-	8	2 flats
ØN	6.45	6.7	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.05 + 0.015 f (GHz)	
Maximum insertion loss	0.02 + 0.02 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

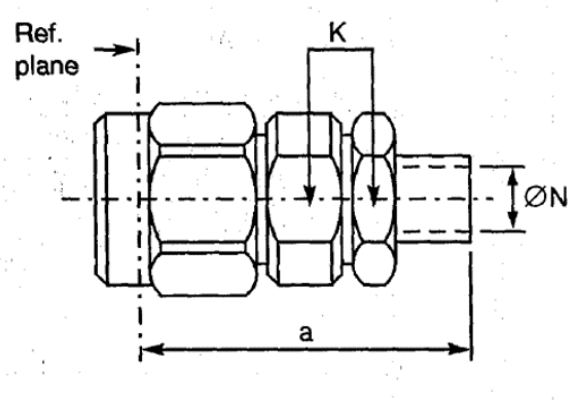
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	9.4	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	Microporous Ø6.35mm	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.5 VARIANT 05 - STRAIGHT PLUG, CRIMP-TYPE



Symbol	Dimensions mm		Notes
	Min	Max	
a	23.1	23.95	
K	-	7	2 flats
ØN	3.15	3.35	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 3	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.015 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

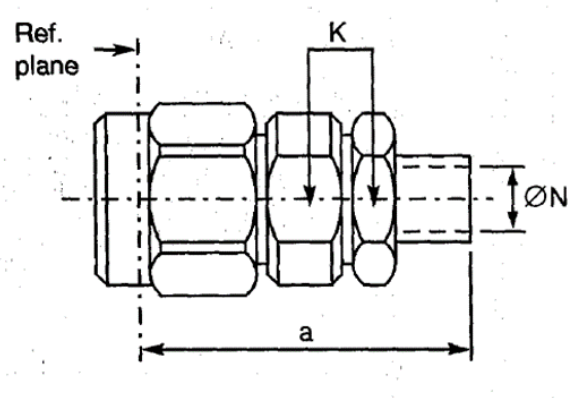
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	0.5	N.cm
Maximum weight	5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used (Note 3)	KX 3B, KX 22A, RG 174/U, RG 316/U	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.6 VARIANT 06 - STRAIGHT PLUG, CRIMP-TYPE, FOR 50 CIS CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	23.1	23.95	
K	-	7	2 flats
ØN	2	2.2	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 3	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.015 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

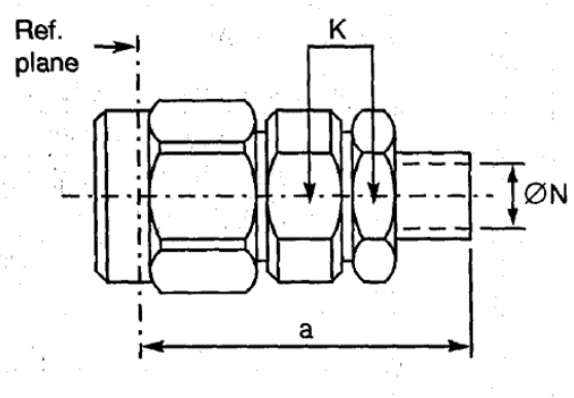
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	0.5	N.cm
Maximum weight	5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used (Note 3)	50 CIS	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.7 VARIANT 07 - STRAIGHT PLUG, CRIMP- OR SOLDER-TYPE, FOR CABLE Ø5MM, SINGLE BRAID



Symbol	Dimensions mm		Notes
	Min	Max	
a	25.1	25.95	
K	-	7	2 flats
ØN	5.55	5.65	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 10	GHz
Maximum voltage standing wave ratio (VSWR)	1.15 + 0.01 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

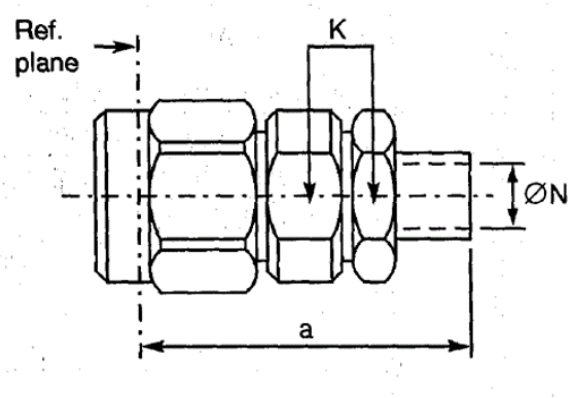
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	0.5	N.cm
Maximum weight	6	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	KX 15, RG 58 C/U, RG 141 A/U	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.8 VARIANT 08 - STRAIGHT PLUG, CRIMP- OR SOLDER-TYPE, FOR CABLE Ø5mm, DOUBLE BRAID



Symbol	Dimensions mm		Notes
	Min	Max	
a	25.1	25.95	
K	-	7	2 flats
ØN	5.55	5.65	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 8	GHz
Maximum voltage standing wave ratio (VSWR)	1.15 + 0.01 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

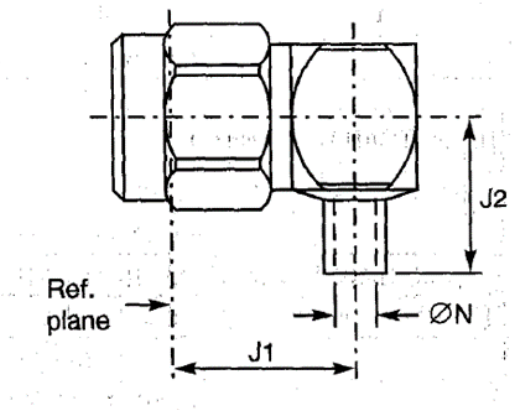
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	0.5	N.cm
Maximum weight	6	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	KX 23, RG 142 B/U, RG 223/U	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.9 VARIANT 09 - RIGHT ANGLE PLUG, SOLDER-TYPE, FOR SEMI-RIGID CABLE Ø2.2mm (0.085")



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	7.25	7.7
ØN	2.25	2.35

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 12.4	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.01 f (GHz)	
Maximum insertion loss	0.02 + 0.02 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

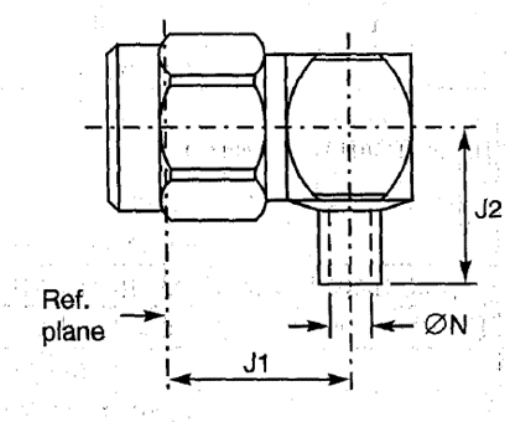
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 2)	KS 1, RG 405/U (Ø2.2mm)	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.10 VARIANT 10 - RIGHT ANGLE PLUG, SOLDER-TYPE, FOR SEMI-RIGID CABLE Ø3.58mm (0.141")



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	7.25	7.7
ØN	3.65	3.75

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 12.4	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.01 f (GHz)	
Maximum insertion loss	0.02 + 0.05 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

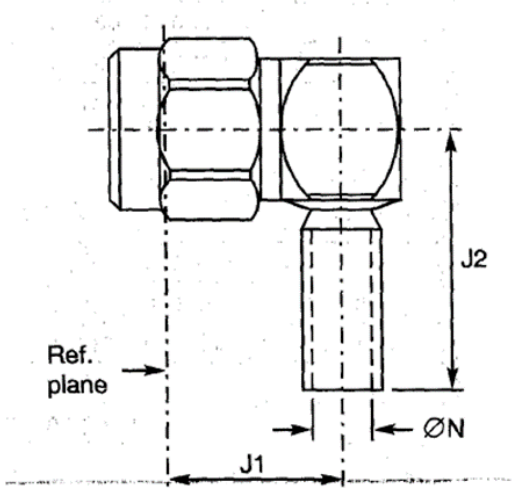
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 2)	KS 2, RG 402/U (Ø3.58mm)	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.11 VARIANT 12 - RIGHT ANGLE PLUG, CRIMP-TYPE



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	-	16.8
ØN	3.25	3.3

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 3	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.025 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

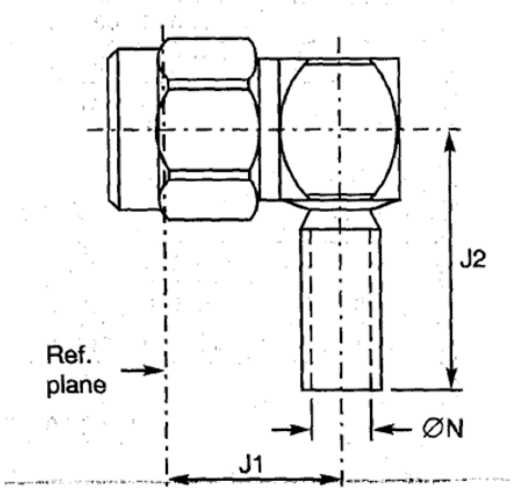
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.8	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used (Note 2)	KX 3B, KX 22A, RG 174/U, RG 316/U	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.12 VARIANT 13 - RIGHT ANGLE PLUG, CRIMP-TYPE, FOR CABLE Ø5mm, SINGLE BRAID



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	-	18
ØN	5.55	5.65

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 10	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.02 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

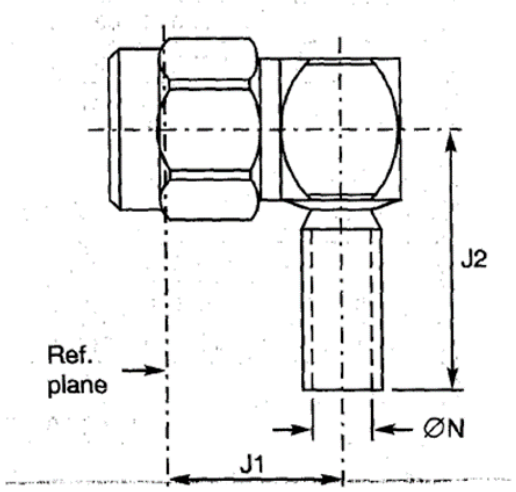
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5.6	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used (Note 2)	KX 15, RG 58C/U, RG 141A/U	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.13 VARIANT 14 - RIGHT ANGLE PLUG, CRIMP-TYPE, FOR CABLE Ø5mm, DOUBLE BRAID



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	-	18
ØN	5.55	5.65

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 8	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.02 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

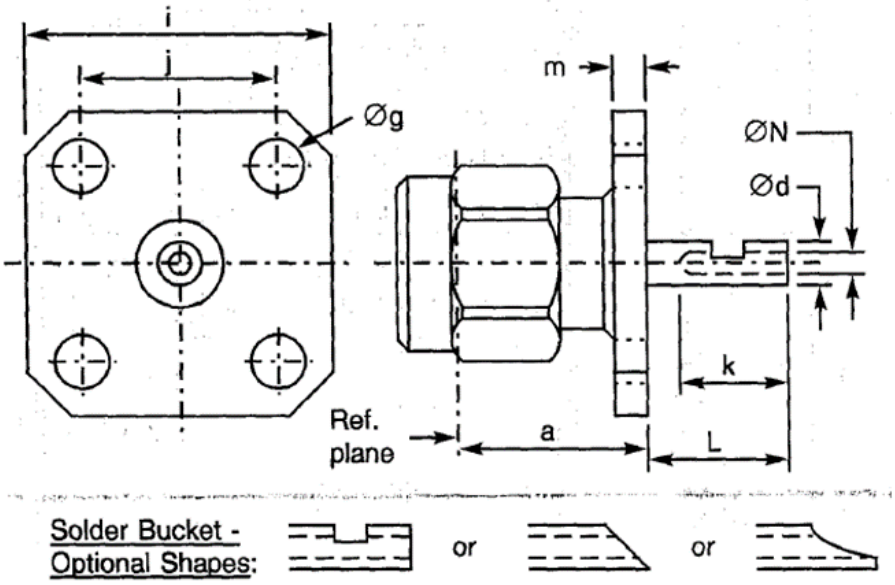
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5.6	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used (Note 2)	KX 23, RG 142 B/U, RG 223/U	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.14 VARIANT 15 - SQUARE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
Ød	1.24	1.3	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
k	2.4	-	
L	4.75	5.25	
m	1.4	1.8	
ØN	0.7	1	

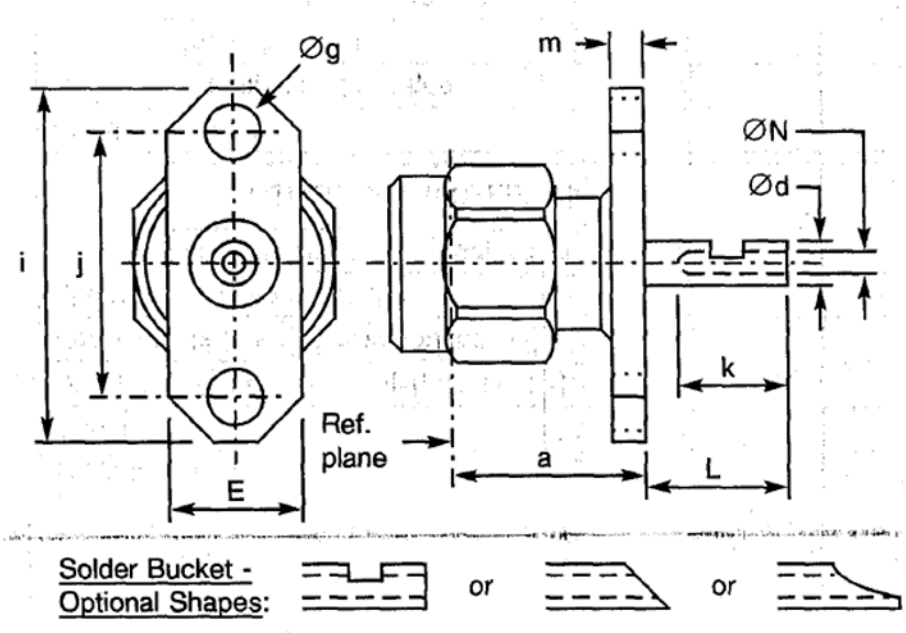
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 1)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 1)	0.02 + 0.03 $\sqrt{f}$ (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
1. For information purposes only.

3.15 VARIANT 16 - 2-HOLE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
Ød	1.24	1.3	
E	5.5	5.8	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
k	2.4	-	
L	4.75	5.25	
m	1.4	1.8	
ØN	0.7	1	

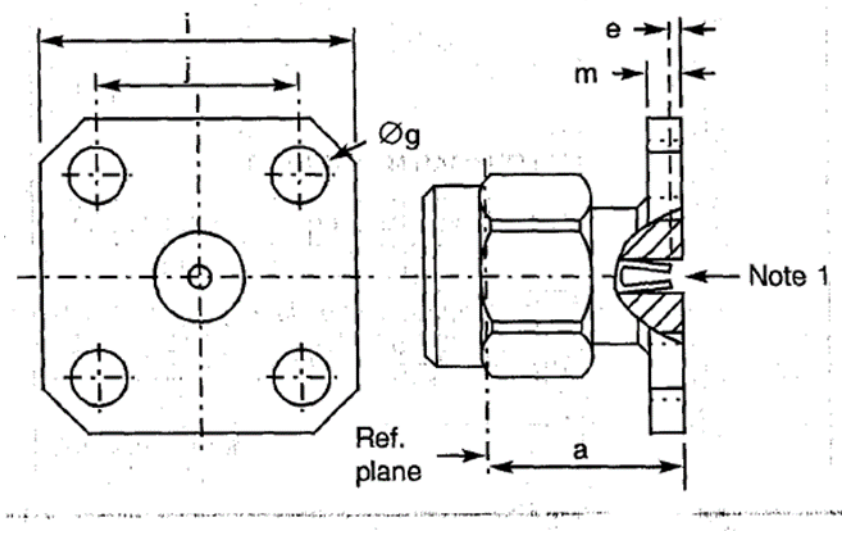
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 1)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 1)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	3.9	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
1. For information purposes only.

3.16 VARIANT 17 - SQUARE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
e	0.18	0.41	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	

NOTES:

1. Contact Engagement and Separation Forces shall be measured on the rear contact (see Para. 2.3(a)).

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.06 + 0.007 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

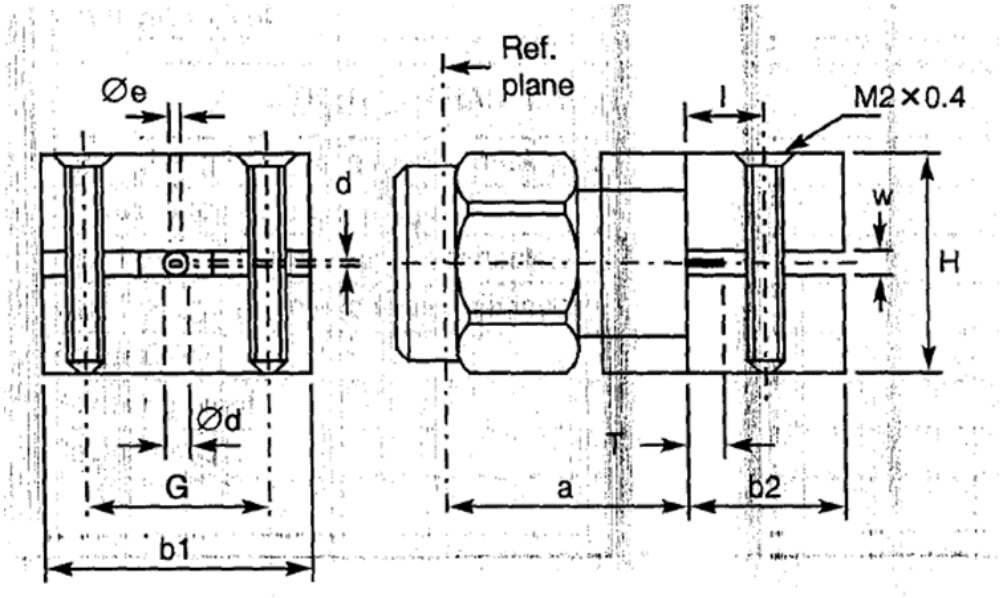
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used	Not applicable	

NOTES:

2. For information purposes only.

3.17 VARIANT 18 - FLANGE MALE RECEPTACLE, TRIPLATE LAUNCHER



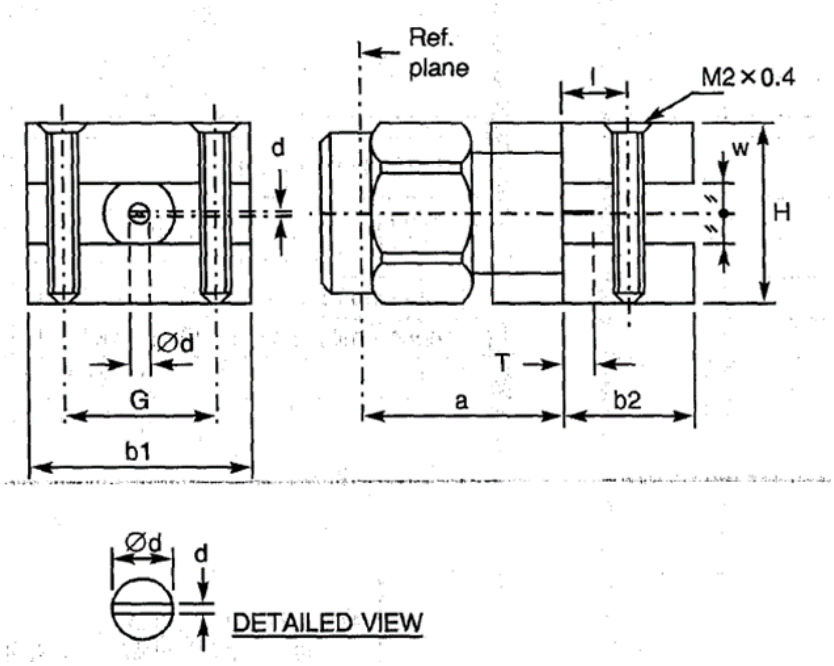
Symbol	Dimensions mm	
	Min	Max
a	9.9	10.1
b1	13.9	14.1
b2	5.6	5.8
d	0.1	0.15
Ød	1.25	1.3
Øe	0.4	0.6
G	9.4	9.6
H	9.4	9.6
l	2.7	2.9
T	0.9	1.1
w	1.55	1.6

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 4	GHz
Maximum voltage standing wave ratio (VSWR)	1.2	
Maximum insertion loss	Not applicable	
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	13	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

3.18 VARIANT 20 - FLANGE MALE RECEPTACLE, TRIPLATE LAUNCHER



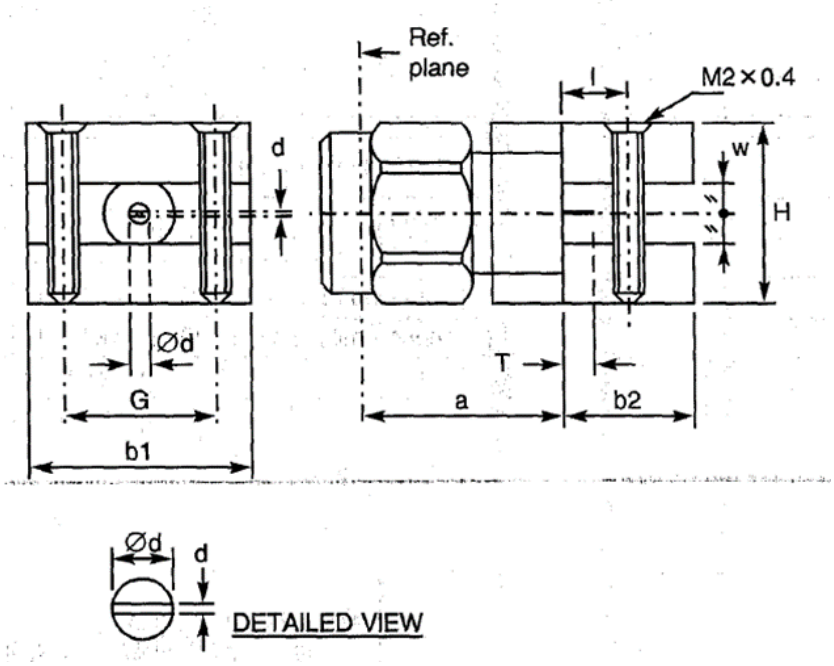
Symbol	Dimensions mm	
	Min	Max
a	9.9	10.1
b1	13.9	14.1
b2	5.6	5.8
d	0.1	0.15
Ød	1.25	1.3
G	9.4	9.6
H	9.4	9.6
l	2.7	2.9
T	2.4	2.6
w	3.15	3.2

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 4	GHz
Maximum voltage standing wave ratio (VSWR)	1.2	
Maximum insertion loss	Not applicable	
Voltage proof	150	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	13	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

3.19 VARIANT 21 - FLANGE MALE RECEPTACLE, TRIPLATE LAUNCHER



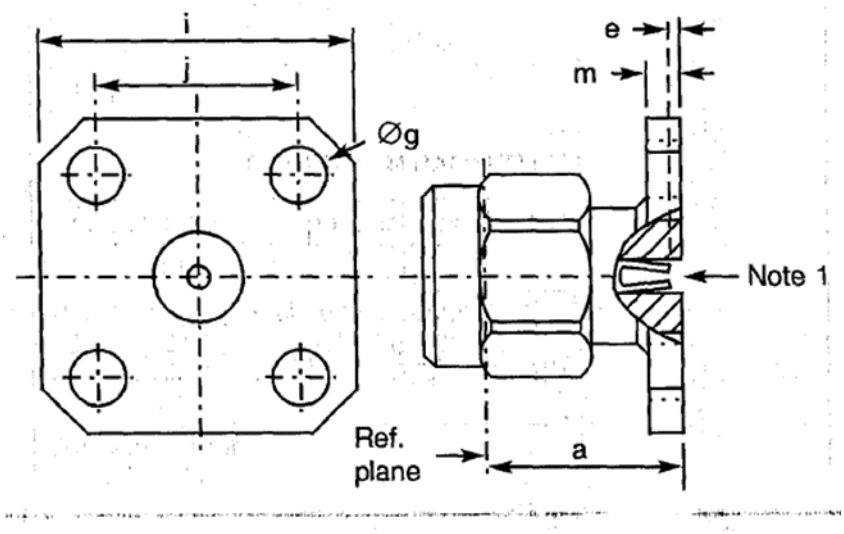
Symbol	Dimensions mm	
	Min	Max
a	9.9	10.1
b1	13.9	14.1
b2	5.6	5.8
d	0.1	0.15
Ød	1.25	1.3
G	9.4	9.6
H	9.4	9.6
l	2.7	2.9
T	2.4	2.6
w	6.35	6.4

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 2	GHz
Maximum voltage standing wave ratio (VSWR)	1.2	
Maximum insertion loss	Not applicable	
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	13	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

3.1 VARIANT 22 - SQUARE FLANGE MALE RECEPTACLE, LOW RF LEAKAGE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
e	0.18	0.41	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	

NOTES:

1. Contact Engagement and Separation Forces shall be measured on the rear contact (see Para. 2.3(a)).

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.06 + 0.007 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-120 at 10GHz	dBi

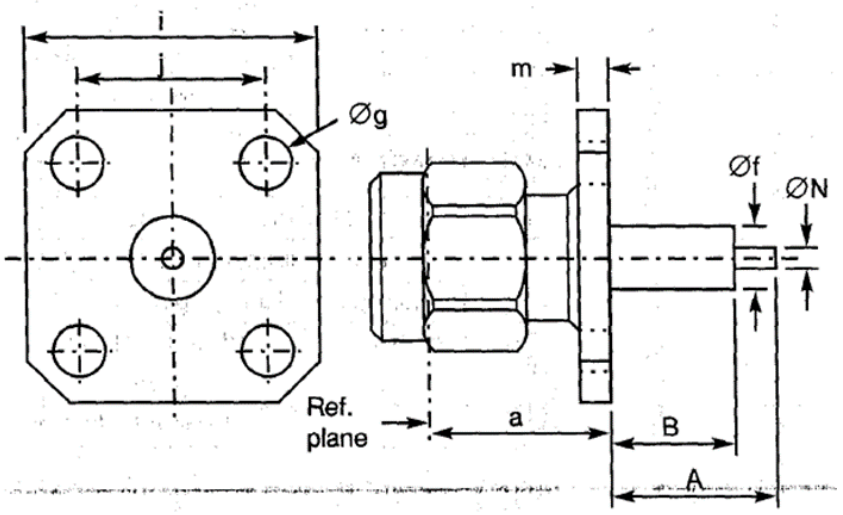
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used	Not applicable	

NOTES:

2. For information purposes only.

3.2 VARIANT 24 - SQUARE FLANGE MALE RECEPTACLE, LOW RF LEAKAGE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
A	-	40.1	Note 1
B	-	20	Note 1
Øf	4	4.2	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	
ØN	1.25	1.3	

NOTES:
1. Contact and Insert dimensions A and B shall be selected by the Orderer; see Para. 1.4.1(b).

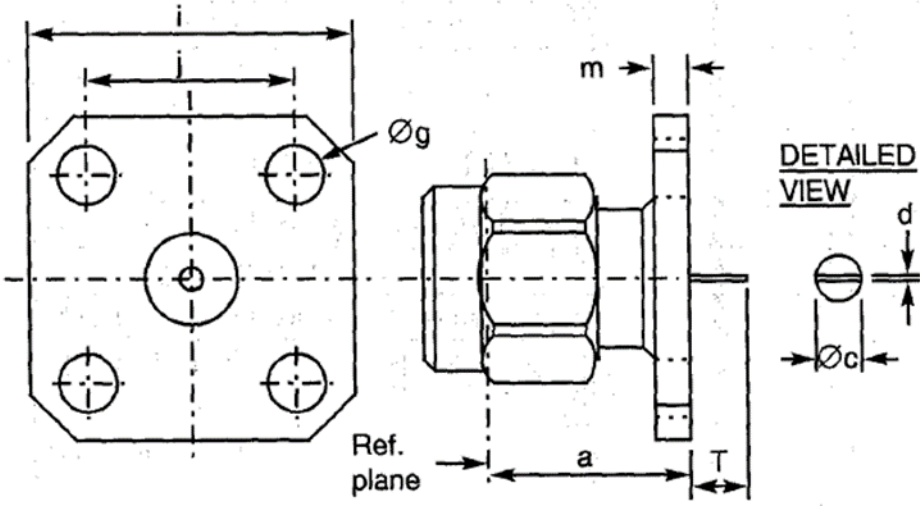
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-120 at 10GHz	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.3 VARIANT 25 - SQUARE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
Øc	1.24	1.3	
d	0.1	0.2	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	
T	2.1	2.55	

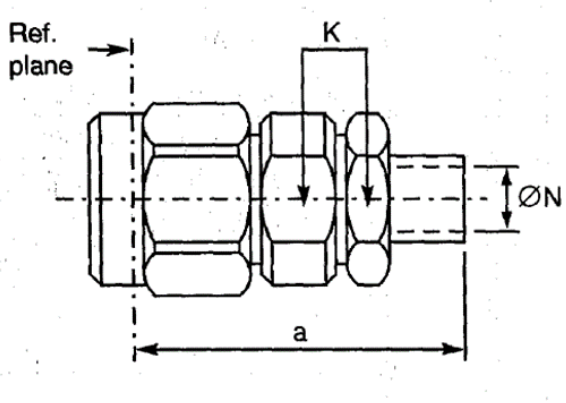
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 1)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 1)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	II	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.3	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
1. For information purposes only.

3.4 VARIANT 26 - STRAIGHT PLUG, CRIMP-TYPE



Symbol	Dimensions mm		Notes
	Min	Max	
a	22.9	24.1	
K	-	7	2 flats
ØN	2.55	2.65	

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 1	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.015 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-95 + f (GHz)	dBi

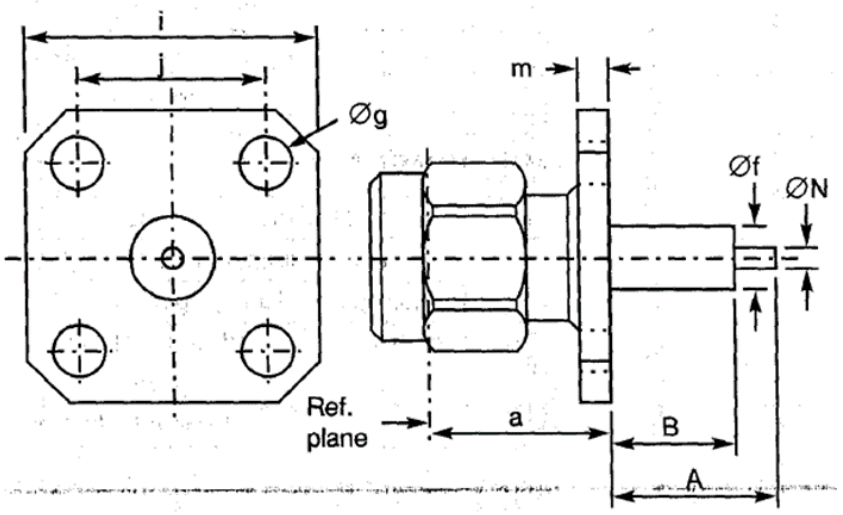
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.3	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used (Note 3)	RG 178/U, KX 21A	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.5 VARIANT 27 - SQUARE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
A	-	40.1	Note 1
B	-	20	Note 1
Øf	4	4.2	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	
ØN	1.25	1.3	

NOTES:
1. Contact and Insert dimensions A and B shall be selected by the Orderer; see Para. 1.4.1(b).

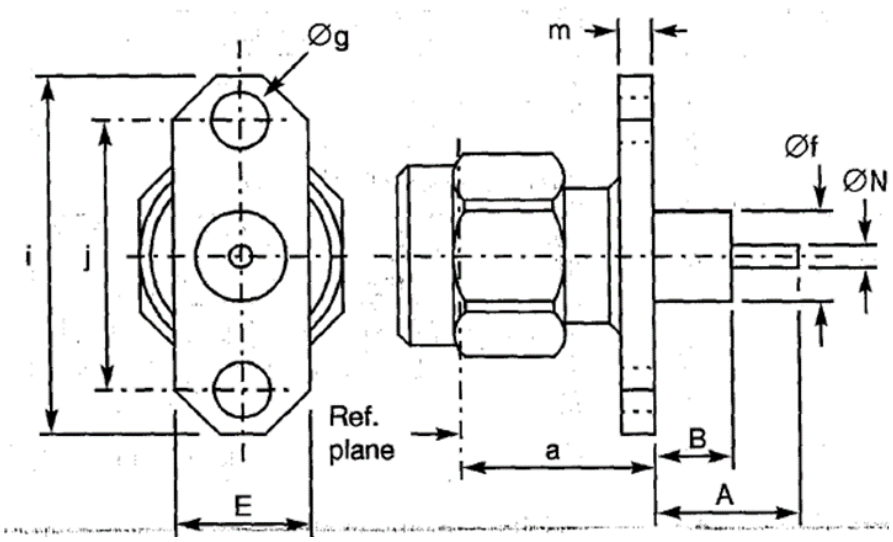
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.6 VARIANT 28 - 2-HOLE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
A	-	40.1	Note 1
B	-	20	Note 1
E	5.5	5.8	
Øf	4	4.2	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
m	1.4	1.8	
ØN	1.25	1.3	

NOTES:
1. Contact and Insert dimensions A and B shall be selected by the Orderer; see Para. 1.4.1(b).

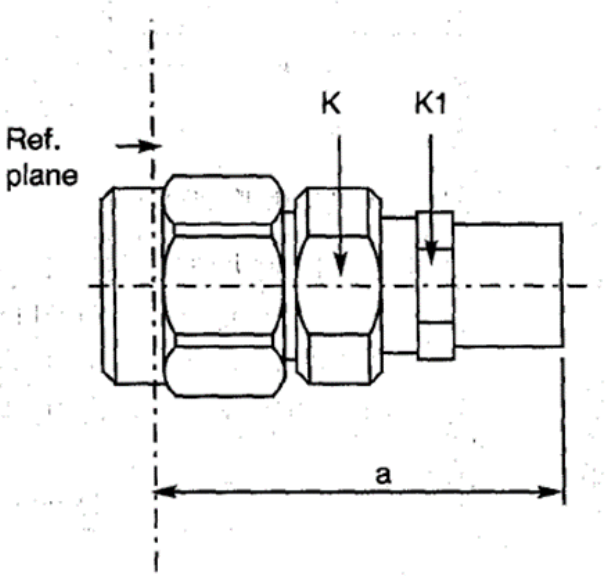
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.7 VARIANT 29 - STRAIGHT PLUG, SOLDER-TYPE FOR SHF 5 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	20.8	21.15	
K	-	8.5	2 flats
K1	-	8	2 flats

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.15	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-90	dBi

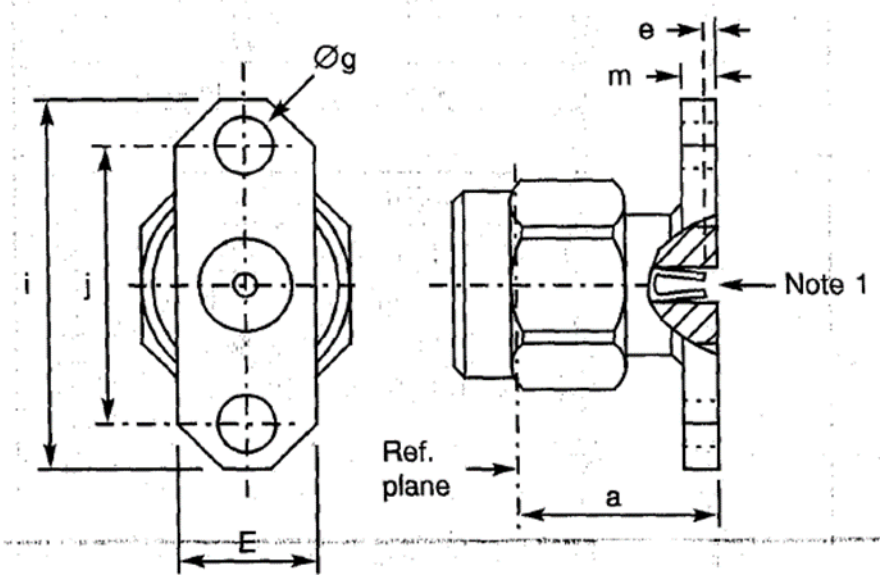
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	5.6	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	F1703-245 (SHF 5MS)	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.8 VARIANT 30 - 2-HOLE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
e	0.18	0.41	
E	5.5	5.8	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
m	1.4	1.8	

NOTES:

1. Contact Engagement and Separation Forces shall be measured on the rear contact (see Para. 2.3(a)).

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.06 + 0.007 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

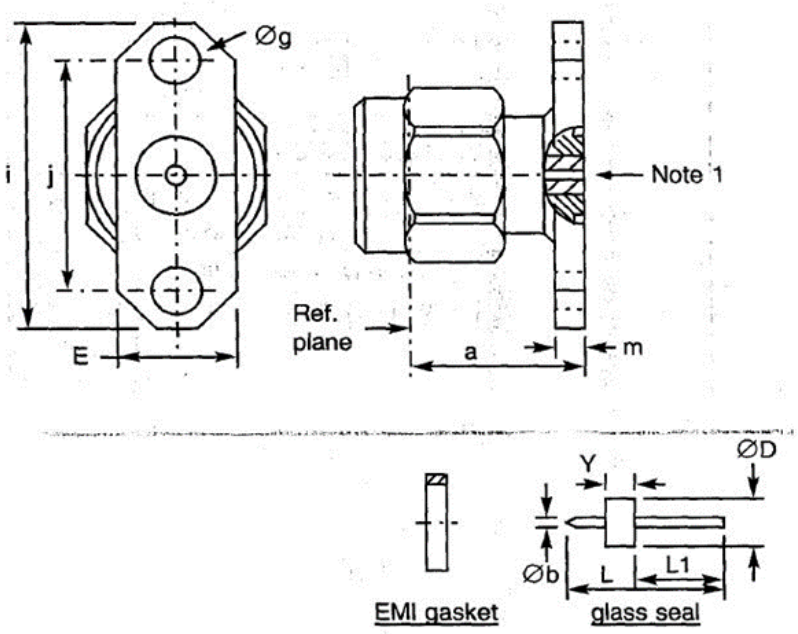
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	Not applicable	
Cables used	Not applicable	

NOTES:

2. For information purposes only.

3.9 VARIANT 32 - 2-HOLE FLANGE MALE RECEPTACLE, WITH HERMETIC GLASS SEAL Ø0.3mm AND EMI GASKET



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
Øb	0.25	0.35	
ØD	2.47	2.57	
E	5.5	5.8	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
L	7.8	8.2	
L1	4.45	4.7	
m	1.4	1.8	
Y	1.55	1.65	

NOTES:
1. Accept contact Ø0.3mm.

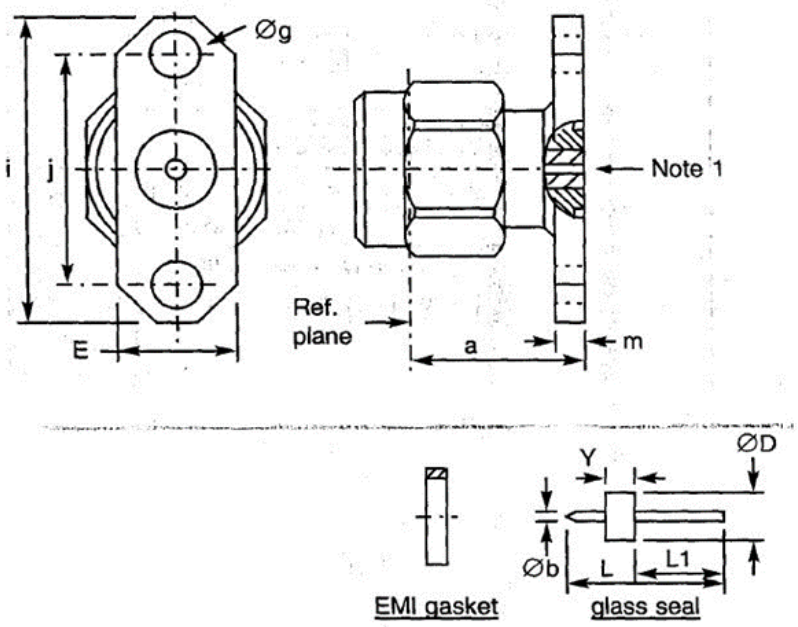
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.06 + 0.01 f (GHz)	
Maximum insertion loss	0.3	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-70	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	3.7	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	10^{-8} (hermetic glass seal only)	$atm.cm^3/s$
Solderability	On hermetic glass seal only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.10 VARIANT 33 - 2-HOLE FLANGE MALE RECEPTACLE, WITH HERMETIC GLASS SEAL Ø0.46mm AND EMI GASKET



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
Øb	0.41	0.51	
ØD	2.47	2.57	
E	5.5	5.8	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
L	7.8	8.2	
L1	4.45	4.7	
m	1.4	1.8	
Y	1.55	1.65	

NOTES:
1. Accept contact Ø0.46mm.

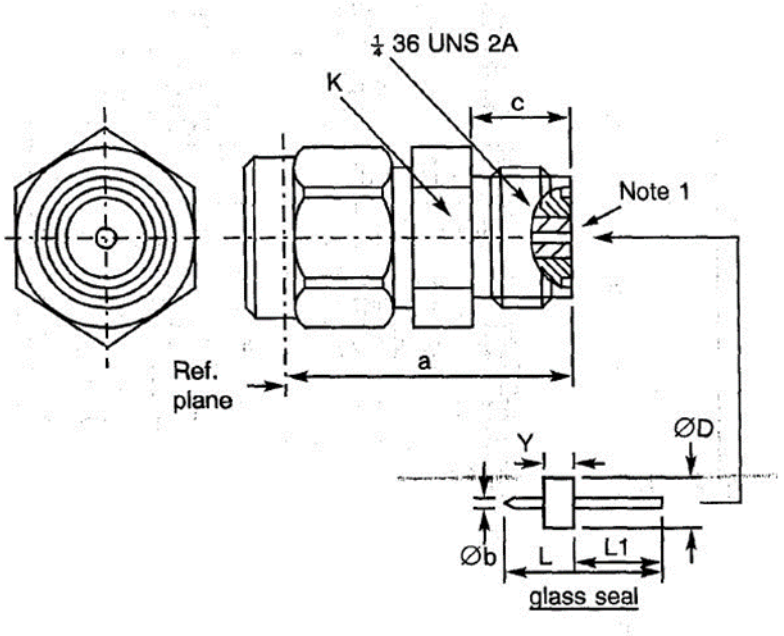
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.06 + 0.01 f (GHz)	
Maximum insertion loss	0.3	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-70	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	3.7	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	10^{-8} (hermetic glass seal only)	$atm.cm^3/s$
Solderability	On hermetic glass seal only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.11 VARIANT 34 - BULKHEAD MALE RECEPTACLE, WITH HERMETIC GLASS SEAL Ø0.3mm



Symbol	Dimensions mm		Notes
	Min	Max	
a	12.95	13.95	
c	4.3	4.5	
Øb	0.25	0.35	
ØD	2.47	2.57	
K	-	7	2 flats
L	7.8	8.2	
L1	4.45	4.7	
Y	1.55	1.65	

NOTES:
1. Accept contact Ø0.3mm.

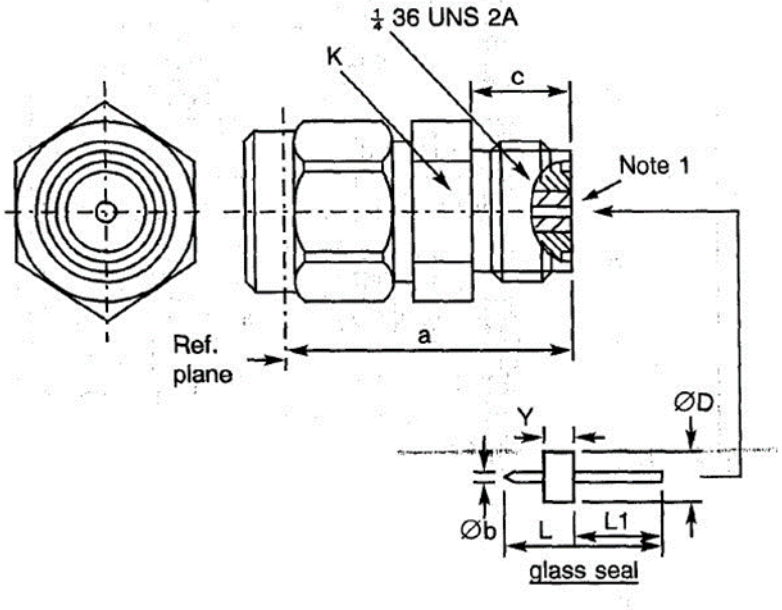
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.06 + 0.01 f (GHz)	
Maximum insertion loss	0.3	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-70	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	10^{-8} (hermetic glass seal only)	$atm.cm^3/s$
Solderability	On hermetic glass seal only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.12 VARIANT 35 - BULKHEAD MALE RECEPTACLE, WITH HERMETIC GLASS SEAL Ø0.46mm



Symbol	Dimensions mm		Notes
	Min	Max	
a	12.95	13.95	
c	4.3	4.5	
Øb	0.41	0.51	
ØD	2.8	2.9	
K	-	7	2 flats
L	7.8	8.2	
L1	4.45	4.7	
Y	1.55	1.65	

NOTES:
1. Accept contact Ø0.46mm.

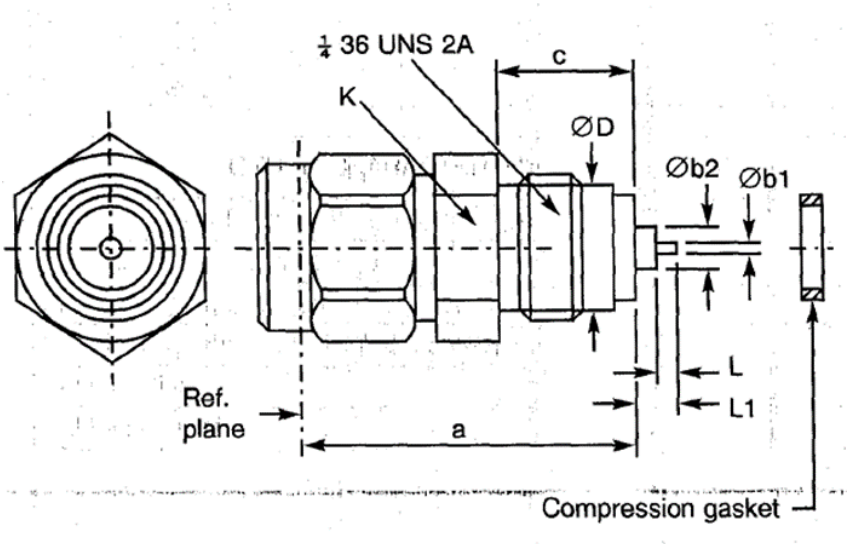
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.06 + 0.01 f (GHz)	
Maximum insertion loss	0.3	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-70	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.2	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	10^{-8} (hermetic glass seal only)	$atm.cm^3/s$
Solderability	On hermetic glass seal only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.13 VARIANT 36 - HERMETIC BULKHEAD MALE RECEPTACLE, WITH COMPRESSION GASKET



Symbol	Dimensions mm		Notes
	Min	Max	
a	14.65	15.65	
Øb1	0.45	0.55	
Øb2	1.62	1.72	
c	5.95	6.25	
ØD	5.3	5.4	
K	-	7	2 flats
L	1.3	1.5	
L1	3.1	3.35	

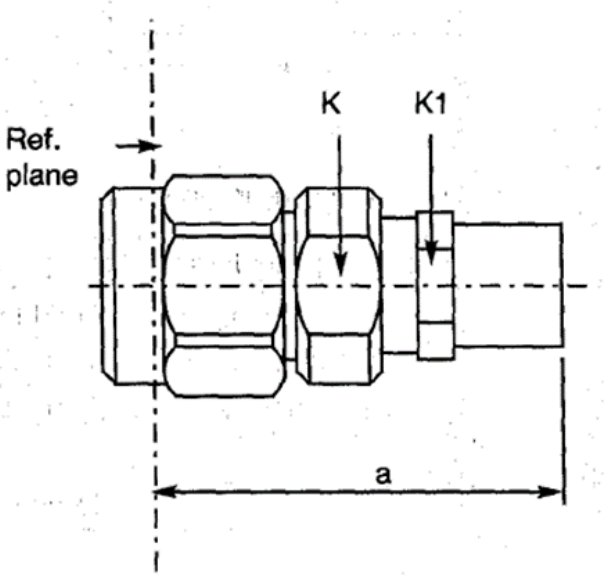
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.06 + 0.01 f (GHz)	
Maximum insertion loss	0.3	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 2)	-70	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	4.4	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +105	°C
Seal: Maximum leakage	10^{-8}	$atm.cm^3/s$
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
1. For information purposes only.

3.14 VARIANT 37 - STRAIGHT PLUG, SOLDER-TYPE FOR SHF 3 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	18.7	19.1	
K	-	6.5	2 flats
K1	-	5	2 flats

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 17	GHz
Maximum voltage standing wave ratio (VSWR)	1.15	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-90	dBi

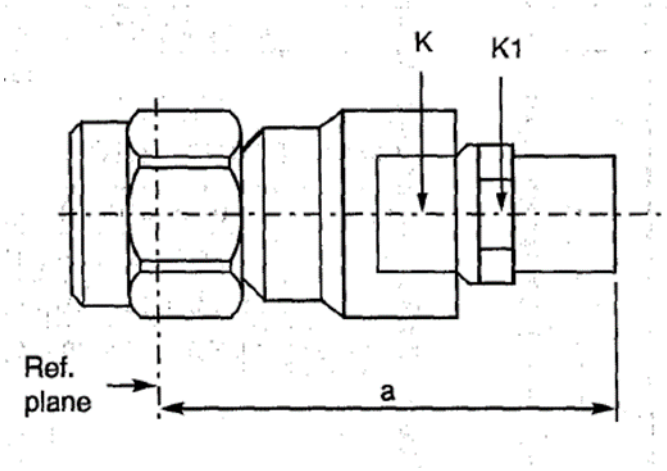
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	F1703-163 (SHF 3MS)	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.15 VARIANT 38 - STRAIGHT PLUG, SOLDER-TYPE FOR SHF 8 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	34.8	35.4	
K	-	13	2 flats
K1	-	12	2 flats

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.15	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-90	dBi

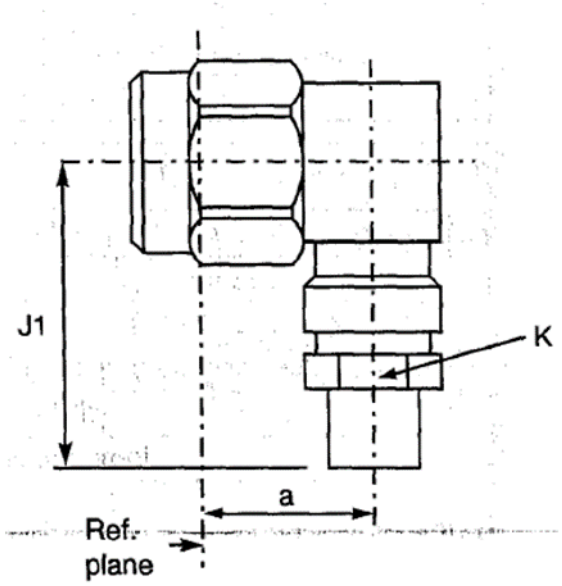
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	24	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	F1703-248 (SHF 8MS)	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.16 VARIANT 39 - RIGHT ANGLE PLUG, SOLDER-TYPE, FOR SHF 3 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	8.65	10	
J1	23.3	23.65	
K	-	5	2 flats

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.3 from 0 to 14.5 GHz 1.4 from 14.5 to 18 GHz	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-90	dBi

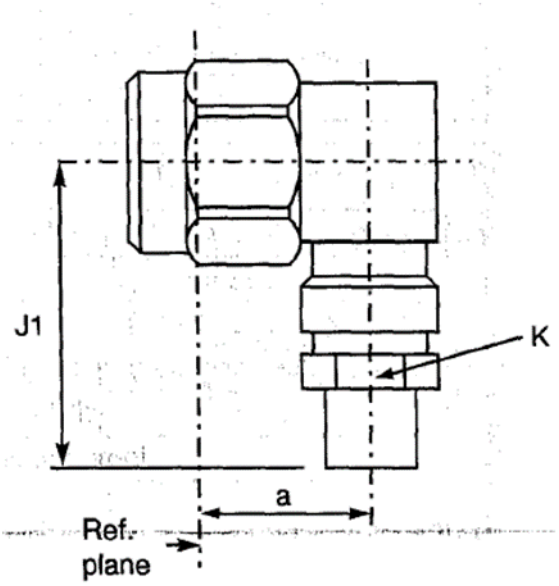
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	7.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 2)	F1703-163 (SHF 3MS)	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.17 VARIANT 40 - RIGHT ANGLE PLUG, SOLDER-TYPE, FOR SHF 5 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	8.65	10	
J1	25.25	25.7	
K	-	8	2 flats

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.3 from 0 to 14.5 GHz 1.4 from 14.5 to 18 GHz	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 1)	-90	dBi

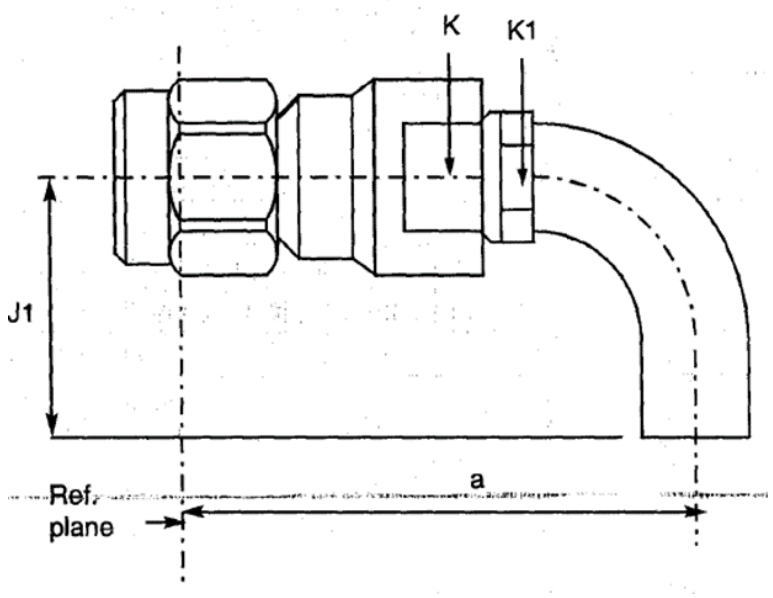
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	10.3	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 2)	F1703-245 (SHF 5MS)	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.18 VARIANT 43 - ELBOW PLUG, SOLDER-TYPE, FOR SHF 8 CABLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	38.35	40.6	
J1	35	37	
K	-	13	2 flats
K1	-	12	2 flats

NOTES:

1. Components are delivered with the centre contact and insulator not mounted in the connector.

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR)	1.15	
Maximum insertion loss	0.02 + 0.06 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-90	dBi

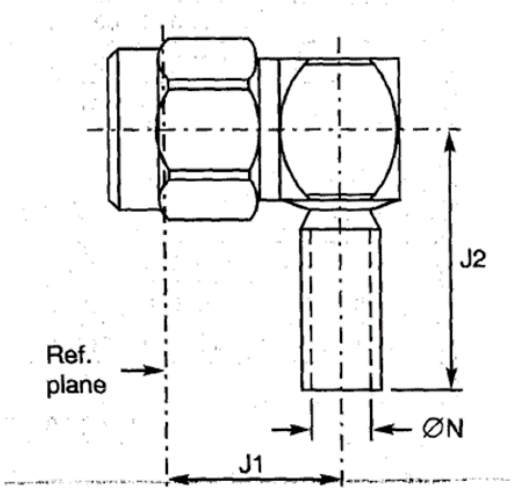
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	Not applicable	
Minimum centre contact retention torque	Not applicable	
Maximum weight	30.4	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 3)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	Applicable	
Cables used (Note 3)	F1703-248 (SHF 8MS)	

NOTES:

2. For information purposes only.
3. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.19 VARIANT 44 - RIGHT ANGLE PLUG, CRIMP-TYPE, FOR 50 CIS CABLE



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	-	16.8
ØN	2	2.2

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 3	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.02 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

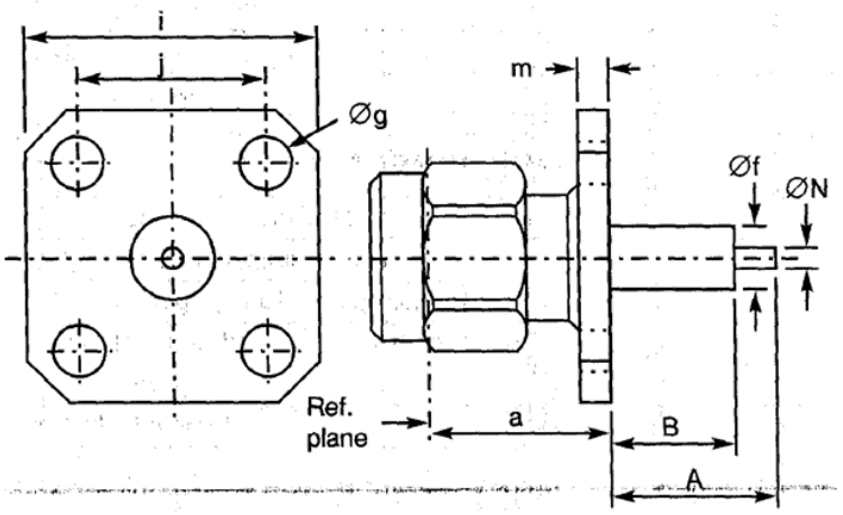
MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.8	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +105	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used (Note 2)	50 CIS	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

3.20 VARIANT 45 - SQUARE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
A	-	40.1	Note 1
B	-	20	Note 1
Øf	4	4.2	
Øg	2.55	2.7	4 holes
i	12.6	12.8	
j	8.59	8.69	
m	1.4	1.8	
ØN	1.25	1.3	

NOTES:
1. Contact and Insert dimensions A and B shall be selected by the Orderer; see Para. 1.4.1(b).

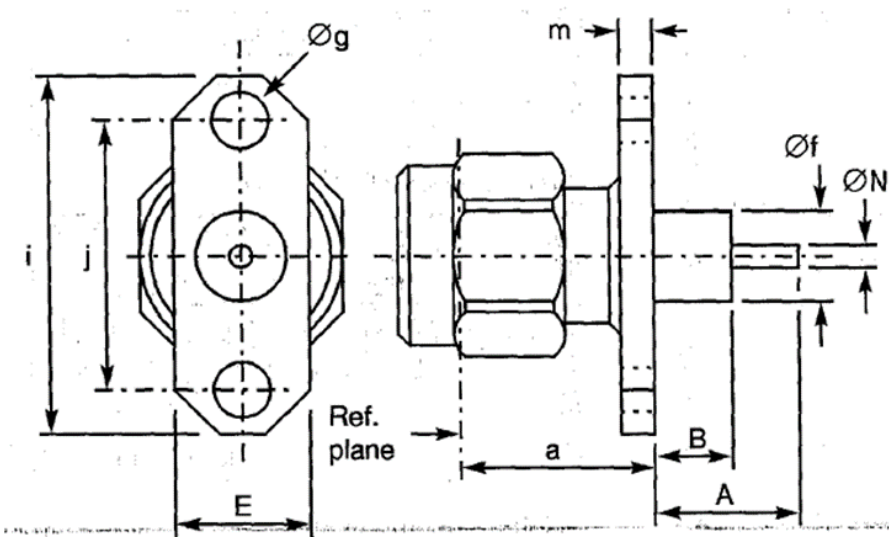
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	5.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.21 VARIANT 46 - 2-HOLE FLANGE MALE RECEPTACLE



Symbol	Dimensions mm		Notes
	Min	Max	
a	9.45	9.55	
A	-	40.1	Note 1
B	-	20	Note 1
E	5.5	5.8	
Øf	4	4.2	
Øg	2.55	2.7	2 holes
i	15.9	16.1	
j	12.1	12.3	
m	1.4	1.8	
ØN	1.25	1.3	

NOTES:
1. Contact and Insert dimensions A and B shall be selected by the Orderer; see Para. 1.4.1(b).

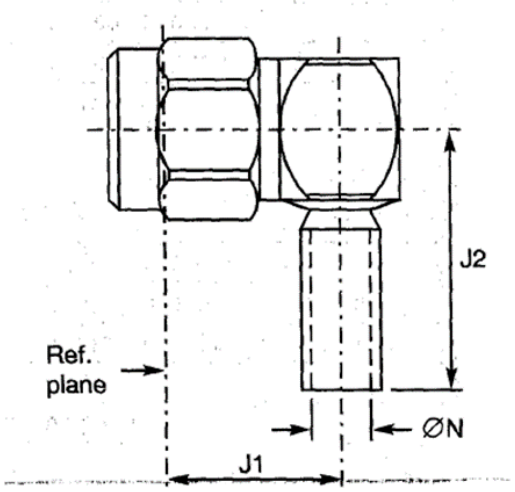
ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 18	GHz
Maximum voltage standing wave ratio (VSWR) (Note 2)	1.05 + 0.003 f (GHz)	
Maximum insertion loss (Note 2)	0.02 + 0.03 √f (GHz)	dB
Voltage proof	1000	Vrms
Power Handling Category (see Para. 1.5 Note 1)	III	
RF Leakage (Note 2)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.5	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used	Not applicable	

NOTES:
2. For information purposes only.

3.22 VARIANT 47 - RIGHT ANGLE PLUG, CRIMP-TYPE, FOR 50 CIS CABLE



Symbol	Dimensions mm	
	Min	Max
J1	10	10.4
J2	-	16.8
ØN	2	2.2

ELECTRICAL CHARACTERISTICS	VALUES	UNITS
Frequency range	0 to 3	GHz
Maximum voltage standing wave ratio (VSWR)	1.1 + 0.02 f (GHz)	
Maximum insertion loss	0.02 + 0.03 √f (GHz)	dB
Voltage proof	750	Vrms
Power Handling Category (see Para. 1.5 Note 1)	I	
RF Leakage (Note 1)	-85 + f (GHz)	dBi

MECHANICAL CHARACTERISTICS	VALUES	UNITS
Minimum centre contact retention force (axial)	27	N
Minimum centre contact retention torque	2.8	N.cm
Maximum weight	4.8	g

OTHER CHARACTERISTICS	VALUES	UNITS
Operating temperature range (Note 2)	-65 to +165	°C
Seal: Maximum leakage	Not applicable	
Solderability	On centre contact only	
Cables used (Note 2)	50 CIS	

NOTES:

1. For information purposes only.
2. In use, the maximum operating and storage temperature ratings shall be limited by the related maximum ratings of the particular cable used.

APPENDIX A
AGREED DEVIATIONS FOR RADIALL (F)

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Para. 1.4.1, The ESCC Component Number	The ESCC Component Number may include the additional Manufacturer's code 'B' as indicated in the following examples: (a) For components with a fixed configuration: Example: 340200101**B**2 (b) For components with a variable configuration: Example: 340200124**B**213D00W02D50C

APPENDIX B
AGREED DEVIATIONS FOR ROSENBERGER (D)

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Para. 1.4.1, The ESCC Component Number	The ESCC Component Number may include the additional Manufacturer's code 'B' as indicated in the following examples: (c) For components with a fixed configuration: Example: 340200101**B**2 (d) For components with a variable configuration: Example: 340200124**B**213D00W02D50C