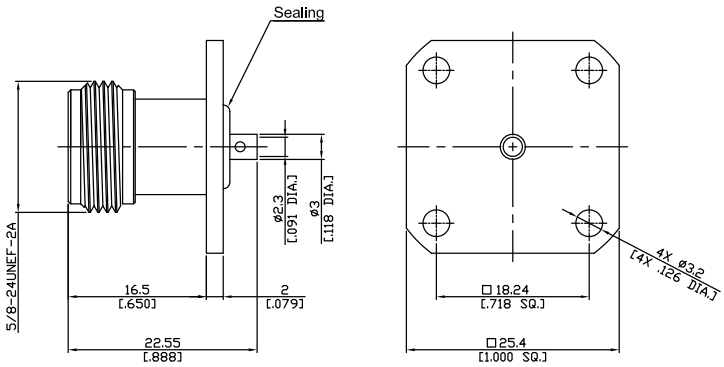
ROSNOL®
RF/Microwave Interconnect

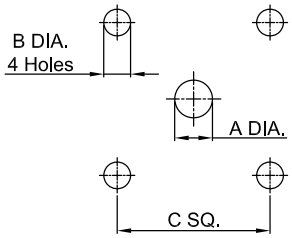
Technical Data Sheet

N Jack (Female) Connector Cable Entry: Solder
Contact Pin: Plug-in Attachment 4 Hole Flange
For RG405, .085", .086" Cables, 18.24mm [.718 inch] Hole Spacing DC-11GHz VSWR1.25

N2EBFS50-EZ085B / 94



MOUNTING DIMENSIONS



	mm		inch	
	MAX.	MIN.	MAX.	MIN.
A	4.6	4.5	.181	.177
B	3.3	3.2	.130	.126
C	18.34	18.14	.722	.714

All dimensions are in mm [inch]
Tolerances according to DIN ISO 2768-mH

Interface

According to	IEC 61169-16, MIL-STD-348B/304

Electrical Data

Impedance	50 Ω	
Frequency	DC to 11 GHz	
VSWR (Return Loss)	≤ 1.25 (≥ 19.08 dB)	
Insertion Loss	≤ 0.05 x √F (GHz) dB	
Insulation Resistance	≥ 5 x10³ MΩ	
Center Contact Resistance	≤ 1 mΩ	
Outer Contact Resistance	≤ 0.25 mΩ	
Working voltage	500 V rms	
Power handling	1000 W @ 1 GHz	700 W @ 2 GHz
RF-leakage	≥ 128 dB up to 1 GHz	
Intermodulation(3rd order)	≤ -160 dBc	

Material And Plating

Connector parts	Material	Plating
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinch)
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	
Gasket	Silicone Rubber	

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Mechanical Data

Coupling mechanisms	Screw-lock
Mating Cycles	min. 500
Centre Contact	Plug-in
Cable entry	Soldered
Center Contact Captivation: axial	≥ 28 N
radial	≥ 3 Ncm
Coupling Test Torque	max. 1.7 Nm
Recommended Torque	0.7 Nm to 1.1 Nm

Environmental Data

Temperature Range	-25°C to +110°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond.B
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture Resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Suitable Cables

RG405, .085", .086" Cables

Packing

Single or 100

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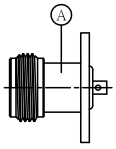
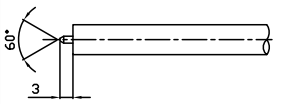
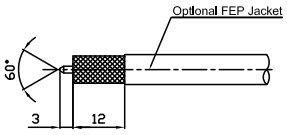
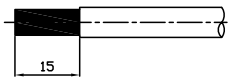
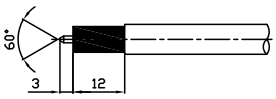
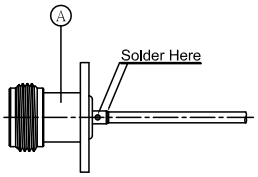
Connector Type:	N2EBFS50-EZ085B/94	Inner Conductor Contact:	Plug-in
Suitable Cable:	RG405, .085, .086 Semi-Rigid and Semi-Flex Cables RG405, .085, .086 Flexible Cables	Outer Conductor Contact:	Soldered

Parts List of Connector:



Assembly Steps:

Picture	Process	Attention/Check	Tools Required
For Semi-Rigid and Semi-Flex Cables:   	For Semi-Rigid and Semi-Form cable : Trim cable according to drawing. Chamfer center contact. Dimension 15 mm applies to the FEP jacket cables.	Strip the cable end perpendicular to its axis. Do not damage center contact.	Blades Trim tools
For Flexible Cables:   	For Flexible Cable: Remove the cable jacket according to the picture and put the braid into liquid tin. Remove cable dielectric according to the drawing. Chamfer center contact.	Do not damage center contact, dielectric or braid. The liquid tin has to cover a length of 15 mm. If the cable does not fit into the cable entry, utilize a flat-nose plier to adjust the outer contact.	Blades Solder pot Flat-nose plier
 	Slide connector body "A" over the cable. Solder connector body "A" to the cable (see drawing).	Avoid excessive heat. Immediately use alcohol to wipe the soldered area to reduce joint temperature and remove residuals.	Solder iron

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