

N Female Connector for 1-5/8" Coaxial Cable, OMNI FIT™ Premium, Straight, O-Ring and compression sealing

OMNI FIT™ high performance connectors are designed for use with both CELLFLEX® (copper) and CELLFLEX® Lite (aluminium) cables. They are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up connector attachment. All RFS connectors are fully tested for mechanical and electrical compliance to industry specifications.

The N connector meets all technical requirements and covers high frequencies as well as legacy applications. Sealing against outer conductor and jacket by means of O-Ring and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.

OMNI FIT™ Premium Connectors

### **FEATURES / BENEFITS**

- Ultra high PIM performance i.e. reduced interference leading to high customer satisfaction
- Two-piece design i.e. visual inspection of interlocking leads to improved installation security
- OMNI FIT™ concept i.e. streamlined order management and reduced stock level
- Watertight sealing in mated and unmated condition, i.e. reduced efforts during installation and improved security during operation
- Unique NiTin plating i.e. extreme resistance against corrosion even under hardest climatic and environmental circumstances
- Multi-thread (Tristart) design i.e. simplified and accelerated tightening process
- RoHS (EU) and CRoHS (China) compliant i.e. can be used on a global basis

# **Technical features**

Transmission Line Type	Coaxial Cable
Cable Size	1-5/8
Cable Type	Foam Dielectric
Model Series	LCF158-50 Series, RCF158-50 Series
Connector Interface	N
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	O-Ring + 360° Compression
Gender	Female

## **ELECTRICAL SPECIFICATIONS**

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-156 ; typical -162
Maximum Frequency	GHz	2.7
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.02 \text{ (40)}$ $1.0 < f \le 2.2 \text{ GHz: } 1.03 \text{ (37)}$ $2.2 < f \le 2.7 \text{ GHz: } 1.06 \text{ (31)}$

# **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Tri metal alloy/Silver
Length	mm (in)	93.6 (3.685)
Outer Diameter	mm (in)	62.8 (2.472)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping

## **ACCESSORIES**

Poly Hook Spanner	mm (in)	PHS 60-90-5 Ø 60-90 (2.3-3.5) Pin 5 (0.2)
Trimming Tool		TRIM-SET-L114-D01
		TRIM-I CF158-D01-A

NF-LCF158-E01 REV : A REV DATE : 06 May 2024 www.rfsworld.com



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