



OMNI FIT™ high performance connectors are designed for use with both CELLFLEX® (copper) and CELLFLEX® Lite (aluminum) 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 is one of the most common RF connector types and meets all requirements even under the most severe environmental conditions.

FEATURES / BENEFITS

- Cost effective two-piece design for safe and easy installation
- Compatible with copper and aluminium cable types i.e. one connector for both outer conductor materials eliminates the risk of faulty connector installation and helps to keep inventory down
- Robust mechanical design for low and consistent intermodulation performance i.e. keeps the mobile network performance up, reduces the number of dropped calls and avoids revenue losses
- Standard electrical performance for consistent and repeatable VSWR i.e. ensure network system performance
- Waterproof to IP 68 i.e. no downtime risk, secures revenue
- RoHS (EU) compliant i.e. can be used on a global basis



OMNI FIT™ Standard Connectors

Technical features

GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable	
Cable Size		1-5/8	
Cable Type		Foam Dielectric	Radiating
Model Series		LCF158-50 Series	RCF158-50 Series
Connector Interface		N	
Connector Type		OMNI FIT™ Standard	
Sealing Method		O-ring	
Gender		Male	

ELECTRICAL SPECIFICATIONS

Nominal Impedance, ohms	Ohm	50	
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical	
Maximum Frequency	GHz	2.75	
VSWR, Return Loss	VSWR (dB)	0 $f \le 1.0 \text{ GHz}$: 1.03 (36.6) 1.0 $f \le 2.2 \text{ GHz}$: 1.04 (34.1) 2.2 $f \le 2.75 \text{ GHz}$: 1.07 (30)	

MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Trimetal/Silver	
Length	mm (in)	76.1 (2.99)	
Outer Diameter	mm (in)	63 (2.48)	
Weight	kg (lb)	0.48 (1.06)	
Inner Contact Attachment		Spring Finger	
Outer Contact Attachment		Spring C-Ring	

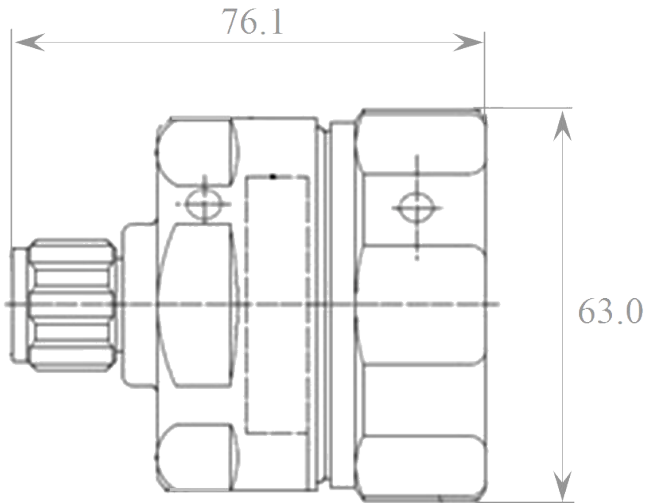


ACCESSORIES

Wrench size front	mm (in)	Open end wrench 55 (2-1/6)
Wrench size rear	mm (in)	Open end wrench 60 (2-1/3)
Poly Hook Spanner	mm (in)	PHS 60-90-5 Ø 60-90 (2.3-3.5) Pin 5 (0.2)
Trimming Tool		TRIM-SET-L158-C02

TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
-------------------------	--	------



External Document Links

[Application Note](#)

[Installation Instruction](#)

Notes