N Male Connector for 1-5/8" Coaxial Cable, OMNI FIT standard, O-ring sealing

OMNI FIT^M 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 | Coaxi | Coaxial Cable | | |
|------------------------|------------------|--------------------|--|--|
| Cable Size | 1 | 1-5/8 | | |
| Cable Type | Foam Dielectric | Radiating | | |
| Model Series | LCF158-50 Series | RCF158-50 Series | | |
| Connector Interface | | N | | |
| Connector Type | OMNI FIT | OMNI FIT™ Standard | | |
| Sealing Method | 0 | O-ring | | |
| Gender | N | 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) | $0 < f \le 1.0 \text{ GHz: } 1.03 \text{ (36.6)}$ $1.0 < f \le 2.2 \text{ GHz: } 1.04 \text{ (34.1)}$ $2.2 < f \le 2.75 \text{ GHz: } 1.07 \text{ (30)}$ |

MECHANICAL SPECIFICATIONS

| Plating Outer/Inner | | Trimetal/Silver |
|--------------------------|---------|-----------------|
| Length | mm (in) | 76.1 (2.99) |
| Outer Diameter | mm (in) | 63 (2.48) |
| Inner Contact Attachment | | Spring Finger |
| Outer Contact Attachment | | Spring C-Ring |

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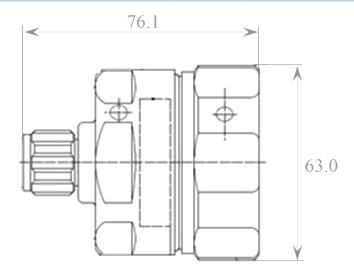
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ACCESSORIES

| 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 | |
|------------------|------|--|
| | 66 | |



External Document Links

Application Note
Installation Instruction

Notes

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