

## 7-16 DIN Female Connector for 7/8" Coaxial Cable, OMNI FIT™ standard, O-ring sealing

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 Technologies connectors are fully tested for mechanical and electrical compliance to industry specifications.

The 7-16 connector is the most rugged RF connection meeting 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
- Superior 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) and CRoHS (China) 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             |                 | 7/8                |                 |
| Cable Type             | Foam Dielectric | Ultraflexible      | Radiating       |
| Model Series           | LCF78-50 Series |                    | RCF78-50 Series |
| Connector Interface    |                 | 7-16 DIN           |                 |
| Connector Type         |                 | OMNI FIT™ Standard |                 |
| Sealing Method         |                 | O-ring             |                 |
| Gender                 |                 | Female             |                 |

#### **ELECTRICAL SPECIFICATIONS**

| Nominal Impedance, ohms              | Ohm       | 50   |
|--------------------------------------|-----------|--|
| 3rd Order IM Product @ 2x20<br>Watts | dBc       | -159 typical   |
| Maximum Frequency                    | GHz       | 3.7  |
| VSWR, Return Loss                    | VSWR (dB) | 0 < f ≤ 1.0 GHz: 1.03 (36.6)<br>1.0 < f ≤ 2.7 GHz: 1.04 (34.1)<br>2.7 < f ≤ 3.7 GHz: 1.08 (28.3) |

#### **MECHANICAL SPECIFICATIONS**

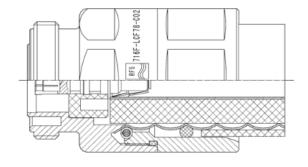
| Plating Outer/Inner      |         | Trimetal/Silver |
|--------------------------|---------|-----------------|
| Length                   | mm (in) | 51.7 (2)        |
| Outer Diameter           | mm (in) | 35.5 (1.4)      |
| Inner Contact Attachment |         | Spring Finger   |
| Outer Contact Attachment |         | Spring O-Ring   |

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| ACCESSORIES               |         |            |  |
|---------------------------|---------|------------|--|
| Wrench size front         | mm (in) | 32 (1-1/4) |  |
| Wrench size rear          | mm (in) | 32 (1-1/4) |  |
| TESTING AND ENVIRONMENTAL |         |            |  |
| Waterproof Level          |         | IP68       |  |
|                           |         |            |  |



External Document Links Application Note Installation Instruction Notes

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