

# 7-16 DIN Female Connector for 1/2" 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



716F-LCF12-C03

# **Technical features**

|  | SPECI |  |
|--|-------|--|
|  |       |  |

| Transmission Line Type |  | Coaxial Cable      |                                 |           |                 |  |
|------------------------|--|--------------------|---------------------------------|-----------|-----------------|--|
| Cable Size             |  | 1/2                |                                 |           |                 |  |
| Cable Type             |  | Foam Dielectric    |                                 | Radiating |                 |  |
| Model Series           |  | LCF12-50 Series    | ICA12-50 Series RCF12-50 Series |           | RCF12-50 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       | -157 ; typical -160            |
| Maximum Frequency                    | GHz       | 6.0                            |
|                                      |           | 0 < f ≤ 1.0 GHz: 1.03 (36.6)   |
|                                      |           | 1.0 < f ≤ 2.7 GHz: 1.04 (34.1) |
| VSWR, Return Loss                    | VSWR (dB) | 2.7 < f ≤ 3.7 GHz: 1.08 (28.3) |
|                                      |           | 3.7 < f ≤ 5.0 GHz: 1.15 (23.1) |
|                                      |           | 5.0 < f ≤ 6.0 GHz: 1.25 (19.1) |

## **MECHANICAL SPECIFICATIONS**

| Plating Outer/Inner      |         | Trimetal/Silver |
|--------------------------|---------|-----------------|
| Length                   | mm (in) | 51.8 (2)        |
| Outer Diameter           | mm (in) | 29 (1.14)       |
| Inner Contact Attachment |         | Spring Finger   |
| Outer Contact Attachment |         | Spring C-Ring   |

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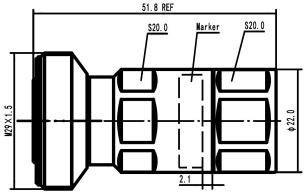


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# ACCESSORIES Wrench size front mm (in) 20 (0.79) Wrench size rear mm (in) 20 (0.79) Trimming Tool TRIM-SET-L12-C02

# **TESTING AND ENVIRONMENTAL**

Waterproof Level IP68



716F-LCF12-C03 Outline drawing

External Document Links Installation instruction

Notes

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