

## 7-16 DIN Male Right Angle 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 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.



716MR-LCF12-C03

### 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

### Technical Features

#### GENERAL SPECIFICATIONS

|                        |  |                                                 |
|------------------------|--|-------------------------------------------------|
| Transmission Line Type |  | Coaxial Cable                                   |
| Cable Size             |  | 1/2"                                            |
| Cable Type             |  | Foam Dielectric                                 |
| Model Series           |  | LCF12-50 Series ICA12-50 Series RCF12-50 Series |
| Connector Interface    |  | 7-16 DIN                                        |
| Connector Type         |  | OMNI FIT™ Standard Right Angle                  |
| Sealing Method         |  | O-Ring                                          |
| Gender                 |  | Male Right Angle                                |

#### ELECTRICAL SPECIFICATIONS

|                                   |           |                                                                                                                                                                                                        |
|-----------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal Impedance                 | Ohm       | 50                                                                                                                                                                                                     |
| 3rd Order IM Product @ 2x20 Watts | dBc       | -157 ; typical -160                                                                                                                                                                                    |
| Maximum Frequency                 | GHz       | 6.0                                                                                                                                                                                                    |
| VSWR, Return Loss                 | VSWR (dB) | 0 < f ≤ 1.0 GHz: 1.04 (34.1)<br>1.0 < f ≤ 2.2 GHz: 1.07 (29.4)<br>2.2 < f ≤ 2.7 GHz: 1.09 (27.3)<br>2.7 < f ≤ 3.7 GHz: 1.13 (24.3)<br>3.7 < f ≤ 5.0 GHz: 1.25 (19.1)<br>5.0 < f ≤ 6.0 GHz: 1.30 (17.7) |

#### MECHANICAL SPECIFICATIONS

|                          |         |                 |
|--------------------------|---------|-----------------|
| Plating Outer/Inner      |         | Trimetal/Silver |
| Length                   | mm (in) | 57.9 (2.28)     |
| Outer Diameter           | mm (in) | 38.7 (1.5)      |
| Weight                   | kg (lb) | 0.135 (0.3)     |
| Inner Contact Attachment |         | Basket          |
| Outer Contact Attachment |         | Spring C-Ring   |

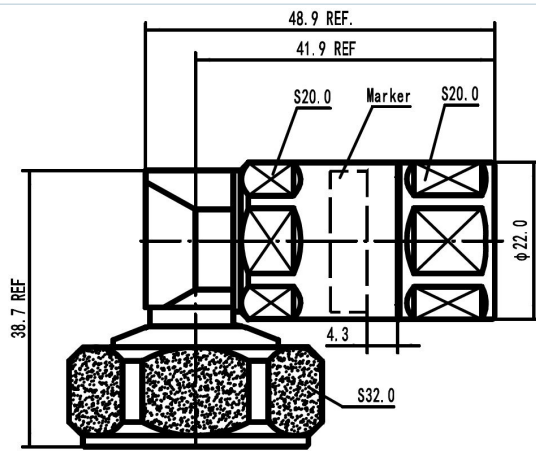
#### ACCESSORIES

|                   |         |            |
|-------------------|---------|------------|
| Wrench size front | mm (in) | 20 (13/16) |
| Wrench size rear  | mm (in) | 20 (13/16) |

#### TESTING AND ENVIRONMENTAL

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

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716MR-LCF12-C03 Outline drawing

| External Document Links  | Notes |
|--------------------------|-------|
| Application Note         |       |
| Installation instruction |       |