

## **PRODUCT DATASHEET** 716MR-SCF12-C03

7-16 Male Right Angle Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard

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
- 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

## **Technical features**



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GENERAL SPECIFICATIONS		
Transmission Line Type	Coaxial Cable	
Cable Size	1/2	
Cable Type	Foam Dielectric Superflexible	
Model Series	SCF12-50 Series	
Connector Interface	7-16	
Connector Type	OMNI FIT™ Standard	
Sealing Method	O-ring	
Gender	Male Right Angle	

## **ELECTRICAL SPECIFICATIONS**

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-157 ; typical -160
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	$\begin{array}{l} 0 \ \< \ f \leq 1.0 \ GHz; \ 1.04 \ (34.1) \\ 1 \ \< \ f \leq 2.2 \ GHz; \ 1.07 \ (29.4) \\ 2.2 \ \< \ f \leq 2.7 \ GHz; \ 1.09 \ (27.3) \\ 2.7 \ \< \ f \leq 3.7 \ GHz; \ 1.13 \ (24.3) \\ 3.7 \ \< \ f \leq 5.0 \ GHz; \ 1.25 \ (19.1) \\ 5.0 \ \< \ f \leq 6.0 \ GHz; \ 1.30 \ (17.7) \end{array}$

### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	53.7 (2.11)
Outer Diameter	mm (in)	38.7 (1.52)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction

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REV DATE : 07 Oct 2018

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