

# 7/8" EIA Connector for 1-5/8" Coaxial Cable, RAPID FIT™ Sealing compound

Radio Frequency Systems' line of high performance coaxial cable connectors are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up the attachment of connectors to CELLFLEX® coaxial cables. RFS Technologies connectors are fully tested for mechanical and electrical compliance specifications. They are available in all popular cable sizes in a variety of mating interfaces. To join two cables with EIA connectors, two identical socket connectors are installed on either end of the cables to be joined, and a coupling element is used to make the connection of the center conductor. The coupling element must be ordered separately with the exception of the S-Line male versions that have a captivated coupling element. Connectors are available in sizes matching the nominal cable size. EIA connectors provide optimal power handling for the complete transmission line system.

## **FEATURES / BENEFITS**

- Single-piece design for Fast and Easy Installation
   Reliable and simple attachment avoids unnecessary connector adjustments and provides outstanding performance every time. Saves time and provides cost savings.
- Robust Mechanical Design
   Low and consistent intermodulation performance guarantees outstanding system sensitivity.
- Excellent Electrical Performance
   Consistent and repeatable low VSWR improves overall system performance and margin and reduces mismatch losses
- Totally Waterproof according to IP 68
  Assures safe, long term operation in the harshest of Environments.

# **Technical features**

## **GENERAL SPECIFICATIONS**

Transmission Line Type	Coaxial Cable	
Cable Size	1-5/8	
Cable Type	Foam Dielectric	
Model Series	LCF158-50	RCF158-50
Connector Interface	7/8" EIA	
Connector Type	RAPID FIT™	
Sealing Method	Sealing compound <sup>1</sup> )	
Gender	None	

## **ELECTRICAL SPECIFICATIONS**

3rd Order IM Product @ 2x20 Watts	dBc	<-156
Maximum Frequency	GHz	2.75
VSWR, Return Loss	VSWR (dB)	0 < f ≤ 1.0 GHz: 1.02 (40) 1.0 < f ≤ 2.7 GHz: 1.04 (34.1) 2.7 < f ≤ 3.7 GHz: 1.06 (30.7)

**78EIA-LCF158-062** REV : E REV DATE : 04 Jun 2021 **www.rfstechnologies.com** 



# 7/8" EIA Connector for 1-5/8" Coaxial Cable, RAPID FIT™ Sealing compound

# **MECHANICAL SPECIFICATIONS**

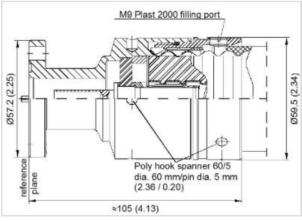
Plating Outer/Inner		Silver/Silver
Length	mm (in)	105 (4.1)
Outer Diameter	mm (in)	57.2 (2.3)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring Finger

## **ACCESSORIES**

Wrench size front	mm (in)	Poly Hook Spanner Wrench
Wrench size rear	mm (in)	Poly Hook Spanner Wrench
Trimming Tool		TRIM-Series-A

## **TESTING AND ENVIRONMENTAL**

Waterproof Level		IP68
Sealing Volume, cm3 (ounces)	cm³ (ounces)	20 (0.68)



Dimensions in mm

External Document Links Installation Instruction

# Notes

<sup>1</sup>) The sealing compound must be ordered separately.

**78EIA-LCF158-062** REV : E REV DATE : 04 Jun 2021 **www.rfstechnologies.com**