

## PRODUCT DATASHEET 78EIA-LCF78-062

7/8" EIA Connector for 7/8" 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 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**



RAPID FIT<sup>™</sup> Connectors

| Transmission Line Type               |           | Coaxial Cable                      |
|--------------------------------------|-----------|------------------------------------|
| Cable Size                           |           | 7/8                                |
| Cable Type                           |           | Foam Dielectric                    |
| Model Series                         |           | LCF78-50A-Series, RCF78-50A-Series |
| 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<br>Watts | dBc       | <-156                              |
| Maximum Frequency                    | GHz       | 3.7                                |
| VSWR, Return Loss                    |           | 0 < f ≤ 1.0 GHz: 1.02 (40)         |
|                                      | VSWR (dB) | 1.0 < f ≤ 2.7 GHz: 1.04 (34.1)     |
|                                      |           | 2.7 < f ≤ 3.7 GHz: 1.06 (30.7)     |
| MECHANICAL SPECIFICATIONS            |           |                                    |
| Plating Outer/Inner                  |           | Silver/Silver                      |

| Plating Outer/Inner      |         | Silver/Silver |
|--------------------------|---------|---------------|
| Length                   | mm (in) | 83 (3.3)      |
| Outer Diameter           | mm (in) | 57.2 (2.3)    |
| Inner Contact Attachment |         | Self Tapping  |
| Outer Contact Attachment |         | Spring Finger |

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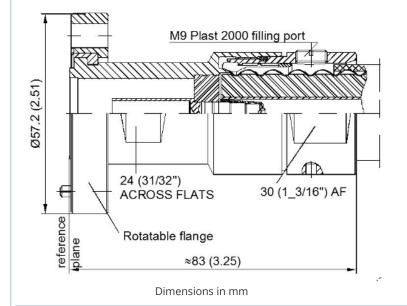
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| ACCESSORIES                  |                          |               |  |  |
|------------------------------|--------------------------|---------------|--|--|
| Wrench size front            | mm (in)                  | 30 (1-3/16)   |  |  |
| Wrench size rear             | mm (in)                  | 30 (1-3/16)   |  |  |
| Trimming Tool                |                          | TRIM-Series-A |  |  |
| TESTING AND ENVIRONMENTAL    |                          |               |  |  |
| Waterproof Level             |                          | IP68          |  |  |
| Sealing Volume, cm3 (ounces) | cm <sup>3</sup> (ounces) | 7 (0.26)      |  |  |



External Document Links Installation Instruction Notes

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

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