

# ELF110 Edge Launch Connector Series Specifications

## Mechanical

|                                   |            | MIL-PRF-39012 Reference | IEEE-287 Reference |
|-----------------------------------|------------|-------------------------|--------------------|
| Mating Torque                     | 4.0 in-lbf | N/A                     | 2.1.9              |
| Center Conductor Insertion Force  | 2.0 ozf    | N/A                     | 2.1.13.2           |
| Center Conductor Withdrawal Force | 0.5 ozf    | N/A                     | 2.1.13.2           |
| Contact Durability                | 500 Cycles | 3.15                    | 2.1.14             |

## Electrical

|                             |                  |                     |                   |
|-----------------------------|------------------|---------------------|-------------------|
| Maximum Frequency           | 110 GHz          | N/A                 | 2.2.7             |
| Impedance                   | 50Ω Nominal      | MIL-PRF-39012 / 60D | 2.1.3             |
| Insulation Resistance       | 5,000 MΩ Minimum | 3.11                | N/A               |
| Center Conductor Resistance | 3.0 mΩ Maximum   | 3.16                | 2.2.3 / 2.2.2.8.5 |
| Outer Conductor Resistance  | 2.0 mΩ Maximum   | 3.16                | 2.2.3 / 2.2.2.8.5 |

## Environmental

|             |               |                     |       |
|-------------|---------------|---------------------|-------|
| Temperature | 0° C – +55° C | MIL-PRF-39012 / 60D | 2.3.2 |
|-------------|---------------|---------------------|-------|

## Materials

|                  |  |  |  |
|------------------|--|--|--|
| Housing          | C360 Brass Alloy UNS C360000 H04 per ASTM B16, Gold Plated per MIL-DTL-45204   |  |  |
| Bottom Clamp     | 303 Stainless Steel, Steel Cres Alloy USN S30300 per ASTM A582, Passivated per AMS2700 Type 2  |  |  |
| Dielectric       | Neoflon per ASTM D1430   |  |  |
| Center Conductor | BeCu UNS C17300 Condition TH04 per ASTM B196, Gold Plated per MIL-DTL-45204<br>Final Plating: Gold Plate per MIL-DTL-45204, Type II, Grade C, .000100" - .000150" Thick<br>Under Plate: Electro Plated Nickel per QQ-N-290A, .000050" - .000150" Thick |  |  |



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