



### Wide Band Coaxial Isolator 4.7– 5.3GHz



Note: Photo is for illustration only.  
Please refer to the outline drawing.

#### Features

- High power handling up to 10W
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

#### Typical Applications

- Aerospace and military applications
- Test and Measurement
- Wireless infrastructure

#### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

| Parameter                  | Min.   | Typ. | Max. | Units    |
|----------------------------|--|------|------|----------|
| Frequency Range            | 4.7 - 5.3  |      |      | GHz      |
| Insertion Loss             |  |      | 0.3  | dB       |
| Reverse Isolation (Note 1) | 23   |      |      | dB       |
| VSWR                       |  |      | 1.2  | :1       |
| Forward Power (CW)         |  |      | 10   | W        |
| Reverse Power (CW)         |  |      | 1    | W        |
| Rotation                   | Clockwise (Standard)<br>Counter Clockwise (upon request) |      |      |          |
| Connectors                 | SMA-Female   |      |      |          |
| Impedance                  | 50   |      |      | $\Omega$ |

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss  
 Bandwidth (5 ~10) % x Center Frequency (Isolation >25dB)  
 Bandwidth (20~30) % x Center Frequency (Isolation >24dB)  
 Bandwidth (40~60) % x Center Frequency (Isolation >23dB)  
 Ask manufacturer for details

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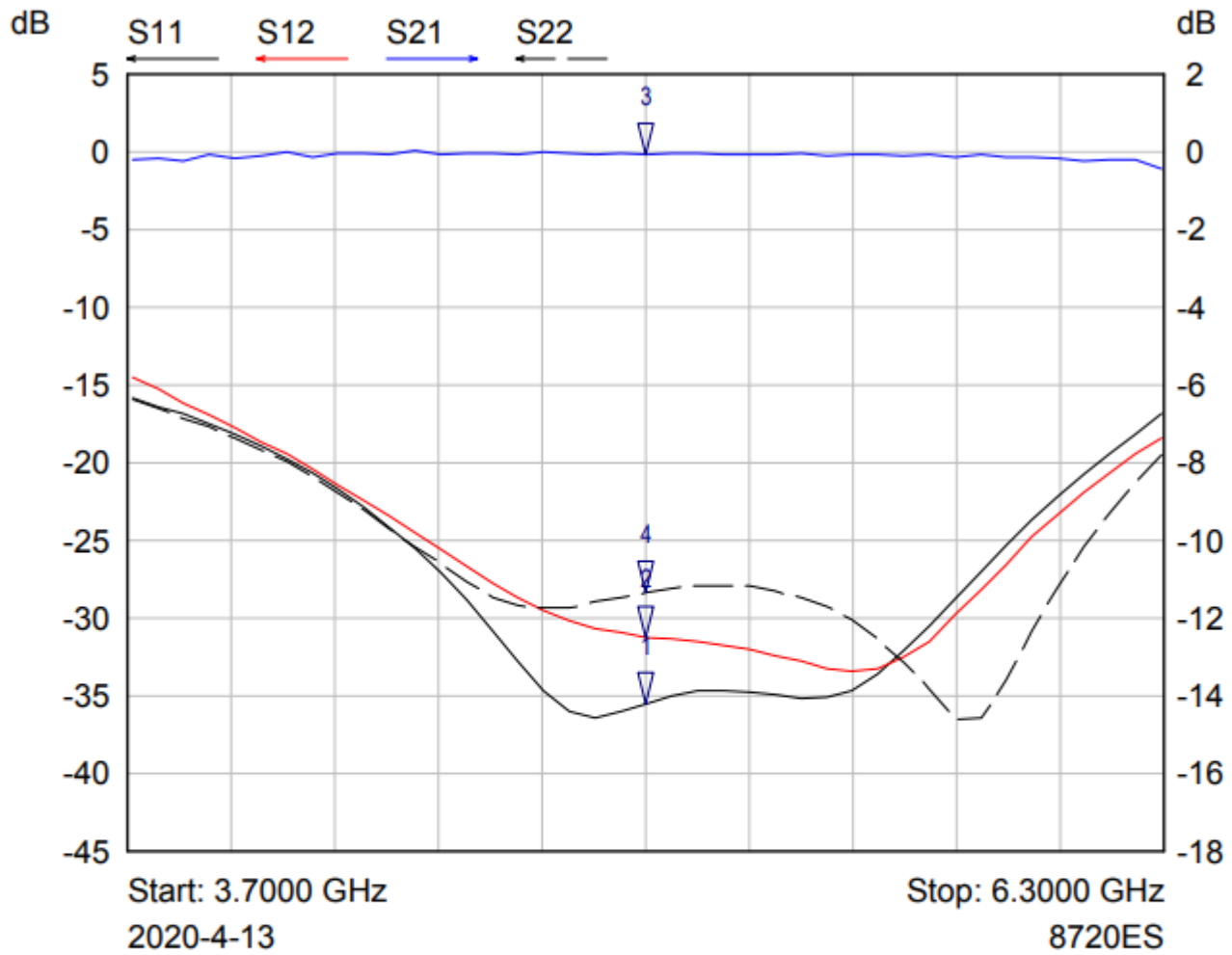
**Environmental Specifications and Test Standards**

| Parameter                        | Standard      | Description   |
|----------------------------------|---------------|---|
| Operational Temperature          | MIL-STD-39016 | -20°C~+60°C   |
| Storage Temperature              |               | -40°C~+80°C   |
| Thermal Shock                    |               | 1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)   |
| Random Vibration                 |               | Acceleration Spectral Density 6 (m/s)<br>Total 92.6 RMS   |
| Electrical & Temperature Burn In |               | Temperature +85°C for 72 Hours  |
| Shock                            |               | 1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude                         |               | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)   |
| Hermetically Sealed (Optional)   |               | MIL-STD-883   |

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Typical Performance Plots



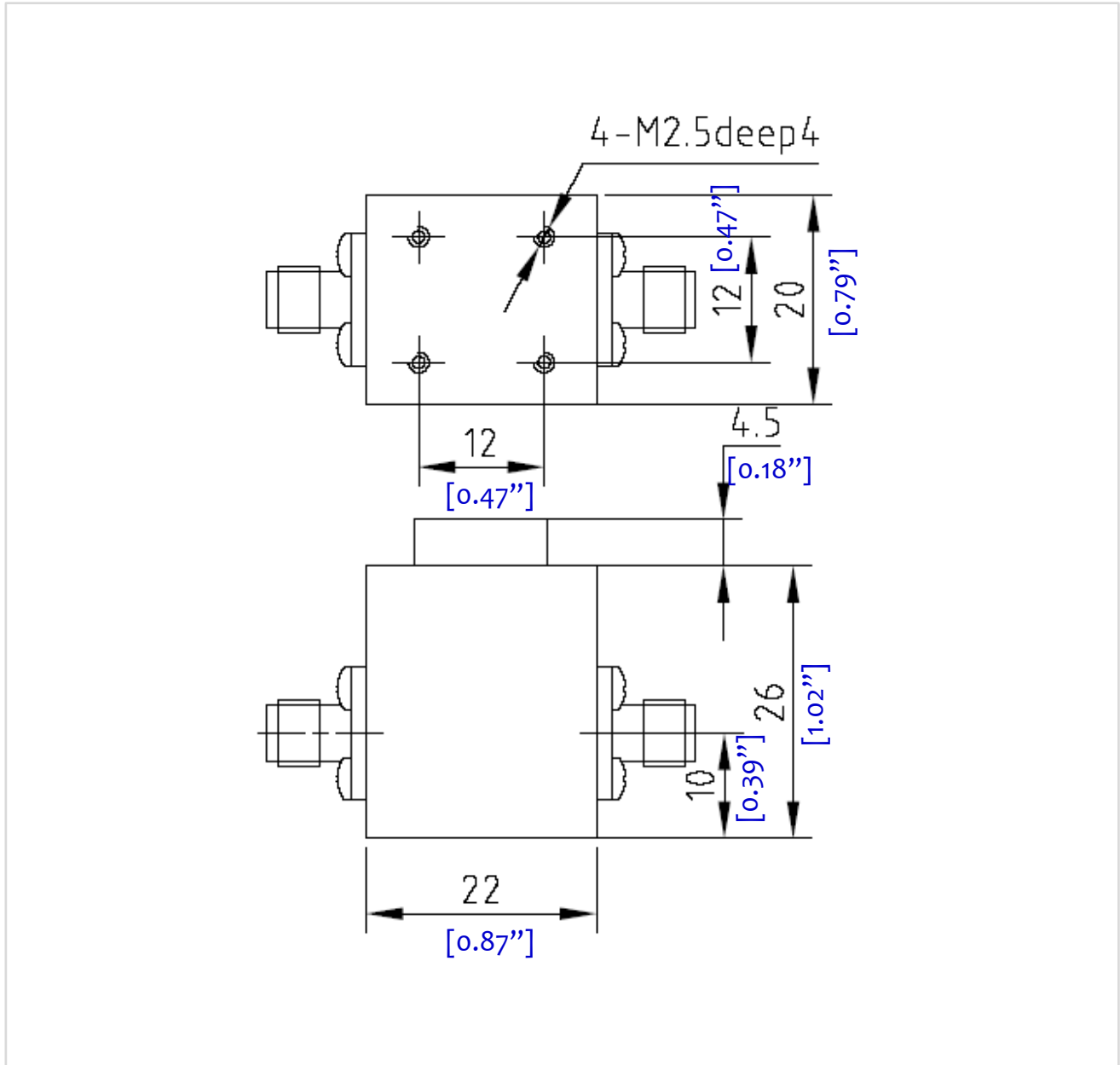
| Mkr | Trace | X-Axis     | Value     | Notes |
|-----|-------|------------|-----------|-------|
| 1 ▾ | S11   | 5.0000 GHz | -35.49 dB |       |
| 2 ▾ | S12   | 5.0000 GHz | -31.24 dB |       |
| 3 ▾ | S21   | 5.0000 GHz | -0.07 dB  |       |
| 4 ▾ | S22   | 5.0000 GHz | -28.35 dB |       |

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### Outline Drawing:

All Dimensions in mm [inches]



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### Important Notice

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