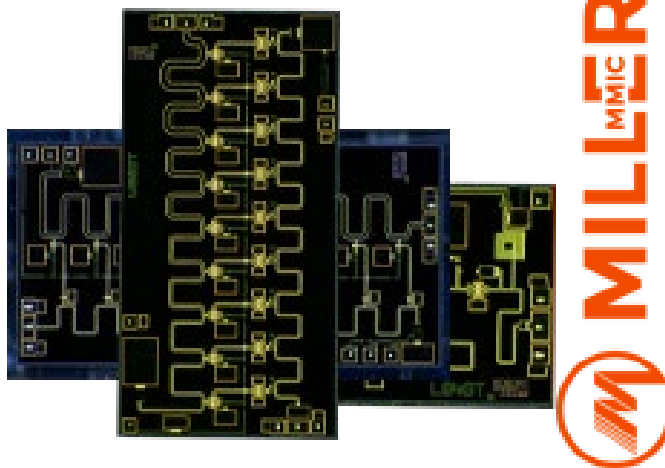


Features

- Ultra broadband single channel attenuator
- Frequency Range: DC - 40GHz
- Attenuation 0, 1, 2... 10, 15, 20, 30dB value
- Power Handling: 27dBm
- 50Ω Input and Output Impedance
- Return Loss: 20dB
- Bare Die (QFN 3x3mm Available)
- RoHS & REACH Compliant

Typical Applications

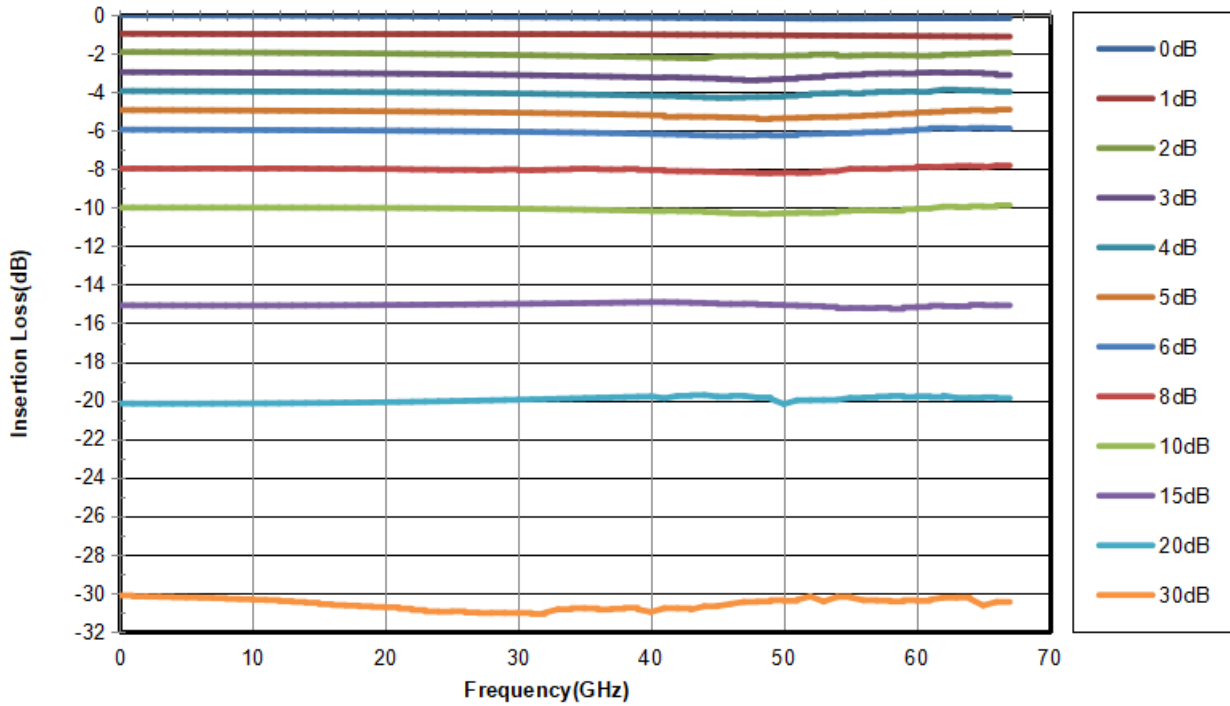
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- General Purpose



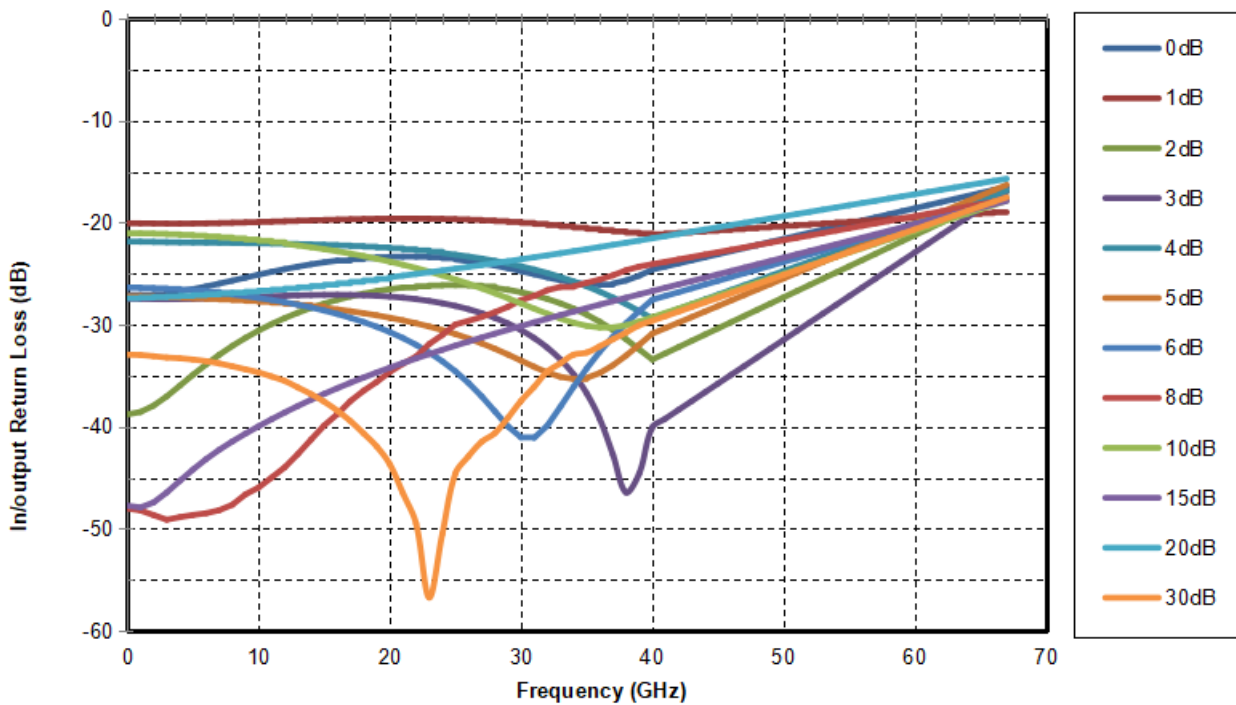
| Part Number | Type | Frequency (GHz) | Attenuator (dB) | Power Handling (dBm) | Return Loss (dB) |
|-------------|------------------|-----------------|-----------------|----------------------|------------------|
| MFA1001 | Fixed Attenuator | DC-40 | 0 | 27 | 20 |
| MFA1002 | Fixed Attenuator | DC-40 | 1 | 27 | 20 |
| MFA1003 | Fixed Attenuator | DC-40 | 2 | 27 | 20 |
| MFA1004 | Fixed Attenuator | DC-40 | 3 | 27 | 20 |
| MFA1005 | Fixed Attenuator | DC-40 | 4 | 27 | 20 |
| MFA1006 | Fixed Attenuator | DC-40 | 5 | 27 | 20 |
| MFA1007 | Fixed Attenuator | DC-40 | 6 | 27 | 20 |
| MFA1008 | Fixed Attenuator | DC-40 | 7 | 27 | 20 |
| MFA1009 | Fixed Attenuator | DC-40 | 8 | 27 | 20 |
| MFA1010 | Fixed Attenuator | DC-40 | 9 | 27 | 20 |
| MFA1011 | Fixed Attenuator | DC-40 | 10 | 27 | 20 |
| MFA1012 | Fixed Attenuator | DC-40 | 15 | 27 | 20 |
| MFA1013 | Fixed Attenuator | DC-40 | 20 | 27 | 20 |
| MFA1014 | Fixed Attenuator | DC-40 | 30 | 27 | 20 |



Attenuation vs. Frequency @Att=0dB



Return Loss vs. Frequency @Att=0dB

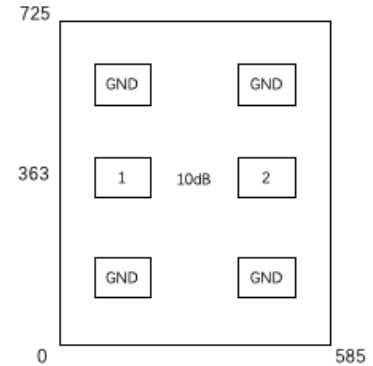




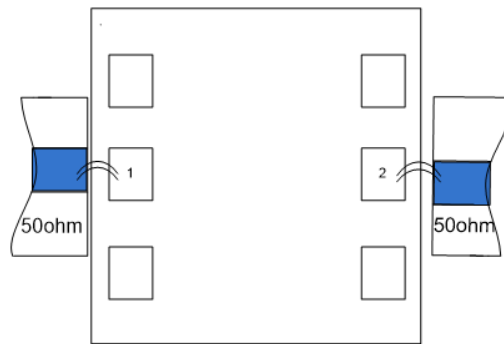
Outline Drawing:

All Dimensions in μm

| Pad | Function | Description |
|------------|----------|---|
| 1 | RF IN | RF signal input terminal; DC blocking capacitor required. |
| 2 | RF OUT | RF signal output terminal; DC blocking capacitor required. |
| Die bottom | GND | Die bottom must be connected to RF/DC ground. |



Assembly Drawing



Notes:

1. Die thickness: $100\mu\text{m}$
2. Typical bond pad is $100*100\mu\text{m}^2$
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)
6. No connection required for unlabeled bond pads

Maximum Ratings:

1. Maximum input power: $+27\text{dBm}$
2. Operating temperature: -55°C to $+85^\circ\text{C}$
3. Storage temperature: -65°C to $+150^\circ\text{C}$

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