

GaAs MMIC Single Channel Series Fixed Attenuator DC-40GHz

## **Features**

· Ultra broadband single channel attenuator

• Frequency Range: DC - 40GHz

• Attenuation 0, 1, 2...10,15, 20, 30dB value

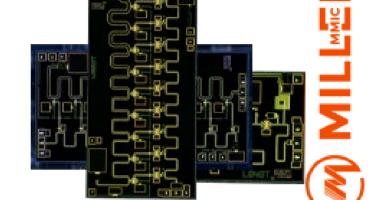
· Power Handling: 27dBm

• 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	Туре	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

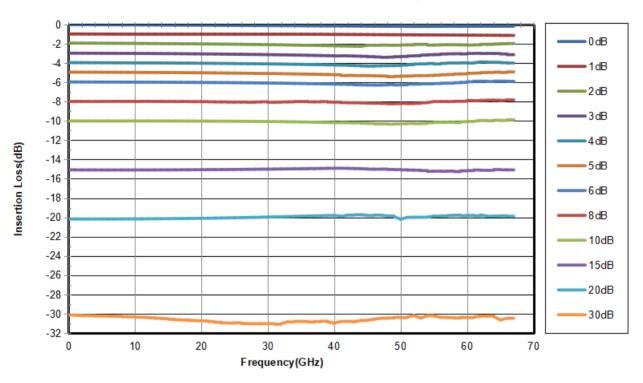
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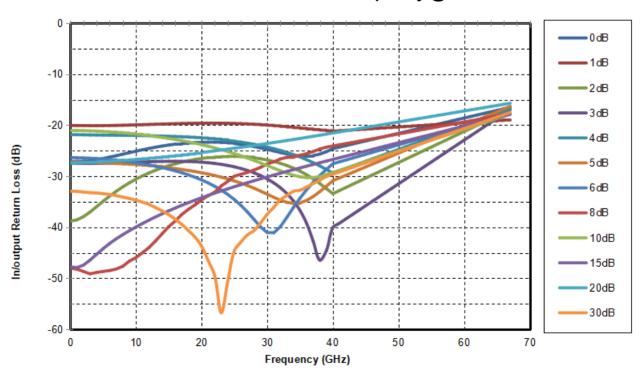


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# Attenuation vs. Frequency @Att=0dB



## Return Loss vs. Frequency @Att=0dB



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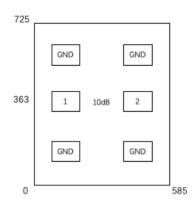


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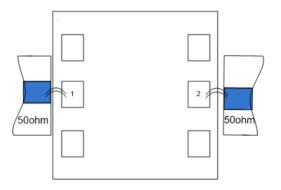
## **Outline Drawing:**

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 µm

2. Typical bond pad is 100\*100 µm²
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: +27dBm

2. Operating temperature: -55°C to +85°C

3. Storage temperature: -65°C to +150°C

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