

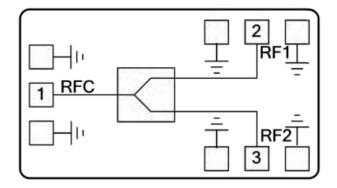
MMD021T

GaAs MMIC 2-Way 18-40GHz Power Splitter/Combiner

Features

- Frequency: 18-40GHz
- Insertion Loss: 0.4dB Typical
- Isolation: 22dB Typical
- Input/Output: 50Ω
- Chip Size: 1.536 x 1.156 x 0.1mm

Functional Block Diagram



Typical Applications

- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications

TA = +25°C ,Pin=0dBm

Parameters	Min.	Тур.	Max.	Units
Frequency	18		40	GHz
Nominal Splitter Loss		3		dB
Insertion Loss		0.4	0.5	dB
Flatness		±0.1		dB
Isolation		20		dB
Input Return Loss		18		dB
Output Return Loss		22		dB

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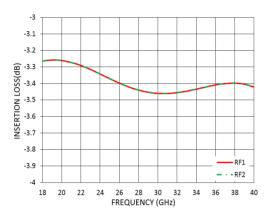


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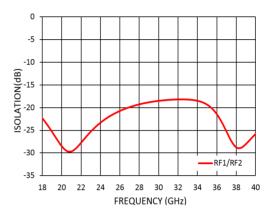
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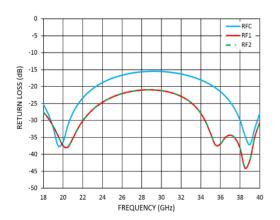
Insertion Loss vs. Frequency



Isolation vs. Frequency



Return Loss vs. Frequency

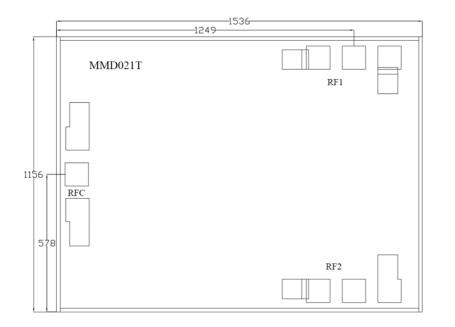




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Outline Drawing: All Dimensions in µm



Absolute Maximum Ratings

RF Input Power	+40dBm	
Operating Temperature	-55°C to +85 °C	
Storage Temperature	-65°C to +150 °C	

No	Symbol	Description
1	RFC	RF Common Port
2,3,	RF1&RF2	RF Branch Ports

Notes:

- 1. Die thickness: 100µm
- 2. RF IN/OUT bond pad is 100 x 100 μm^2
- 3. Bond pad metalization: Gold
- 4. Backside metalization: Gold
- 5. Backside of the die (GND)

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