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GaAs MMIC 2-Way 8-12GHz Power Splitter/Combiner

Features

Frequency: 8-12GHzInsertion Loss: 0.3dB Typical

Insertion Loss, 0.3dB Typical
Isolation: 30dB Typical

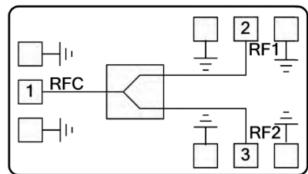
• Input/Output: 50Ω

• Chip Size: 1.154 x 1.561 x 0.1mm

Typical Applications

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

Functional Block Diagram



Electrical Specifications

$TA = +25^{\circ}C$, Pin=0dBm

Parameters	Min.	Тур.	Max.	Units
Frequency	8		12	GHz
Nominal Splitter Loss		3		dB
Insertion Loss		0.3	0.5	dB
Insertion Loss Flatness		±0.1		dB
Isolation	25	30		dB
Input Return Loss	21	25		dB
Output Return Loss	22	27		dB

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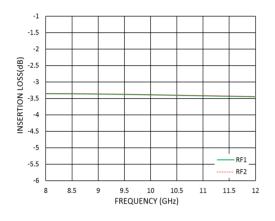
Sales: sales@millermmic.com



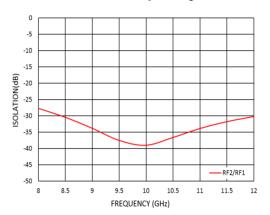
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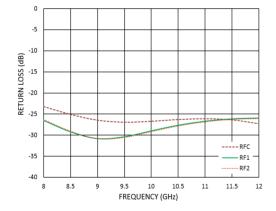
Insertion Loss vs. Frequency



Isolation vs. Frequency



Return Loss vs. Frequency



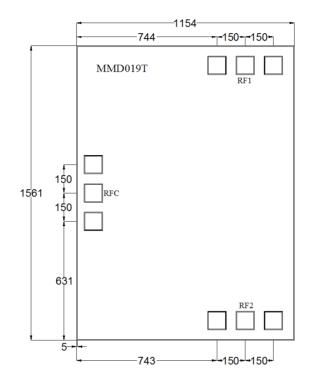
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Outline Drawing: All Dimensions in µm



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*100um²

3. Bond pad metalization: Gold4. Backside metalization: Gold5. Backside of the die (GND)

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