

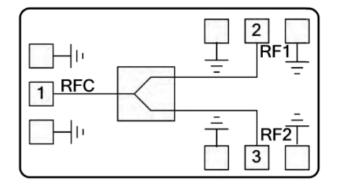
# MMD014T

GaAs MMIC 2-Way 1-9GHz Power Splitter/Combiner

#### Features

- Frequency: 1-9GHz
- Insertion Loss: 0.9dB Typical
- Isolation: 20dB Typical
- Input/Output: 50Ω
- Chip Size: 3.085 x 2.422 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	1		9	GHz
Nominal Splitter Loss		3		dB
Insertion Loss		0.9	1.2	dB
Insertion Loss Flatness		±0.3		dB
Isolation	12	20		dB
Input Return Loss	12	17		dB
Output Return Loss	14	20		dB

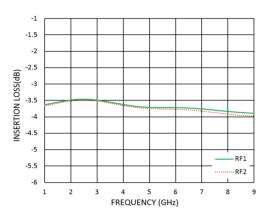
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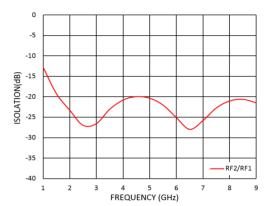
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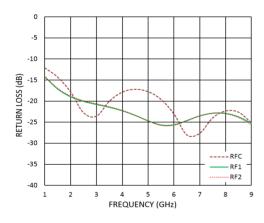
### Insertion Loss vs. Frequency



**Isolation vs. Frequency** 



**Return Loss vs. Frequency** 

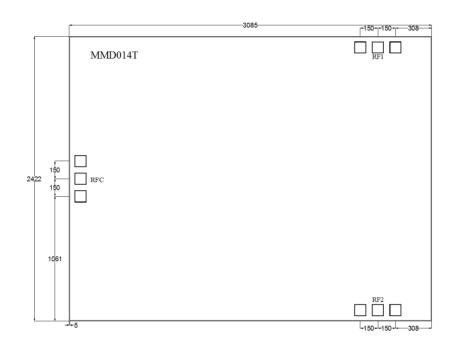




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## Outline Drawing: All Dimensions in µm



### **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\*100µm<sup>2</sup>
- 3. Bond pad metalization: Gold
- 4. Backside metalization: Gold
- 5. Backside of the die (GND)

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