

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

#### **Features**

Frequency: 2-18GHz Insertion Loss: 0.7dB Input/Output: 50Ω

• Chip Size: 1.97 x 1.924 x 0.1mm

### **Typical Applications**

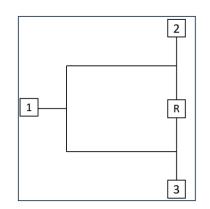
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

# **Electrical Specifications**

TA = +25°C

Parameters	Min.	Тур.	Max.	Units
Frequency	2		18	GHz
Insertion Loss		0.7		dB
Flatness		±0.5		dB
Isolation		22		dB
Input Return Loss		21		dB
Output Return Loss		22		dB

# **Functional Block Diagram**



Sales: sales@millermmic.com



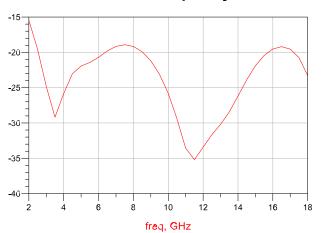
V1.0.0

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## Insertion Loss vs. Frequency



# Isolation vs. Frequency



## **Return Loss vs. Frequency**



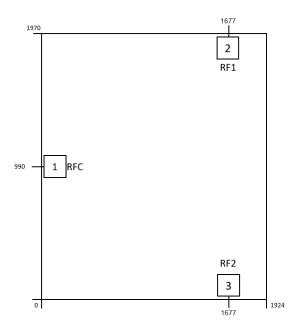
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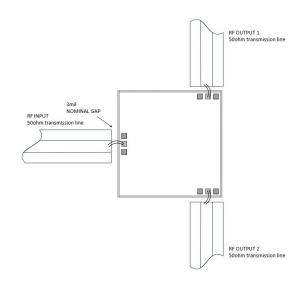
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### Outline Drawing: All Dimensions in μm



### **Assembly Drawing**



# **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	RF IN	RF Input Port
2,3	RF OUT	RF Output Port

#### Notes:

1. Die thickness: 100µm

2. RF IN/OUT bond pad is 100 x 100 µm<sup>2</sup>

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

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