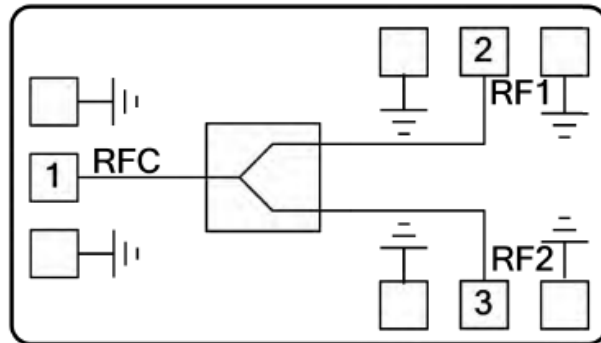




Features

- Frequency: 18-26GHz
- Insertion Loss: 0.65dB Typical
- Isolation: 23dB Typical
- Input/Output: 50Ω
- Chip Size: 0.965 x 0.965 x 0.1mm

Functional Block Diagram



Typical Applications

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

Electrical Specifications

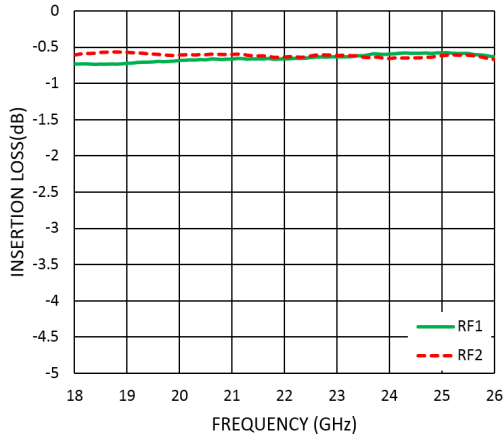
TA = +25°C ,Pin=0dBm

Parameters	Min.	Typ.	Max.	Units
Frequency	18		26	GHz
Nominal Splitter Loss		3		dB
Insertion Loss		0.65	0.8	dB
Insertion Loss Flatness		±0.1		dB
Amplitude Imbalance		±0.05		dB
Phase Imbalance		±0.1		deg
Isolation	18	23		dB
Input Return Loss		-20		dB
Output Return Loss		-25		dB



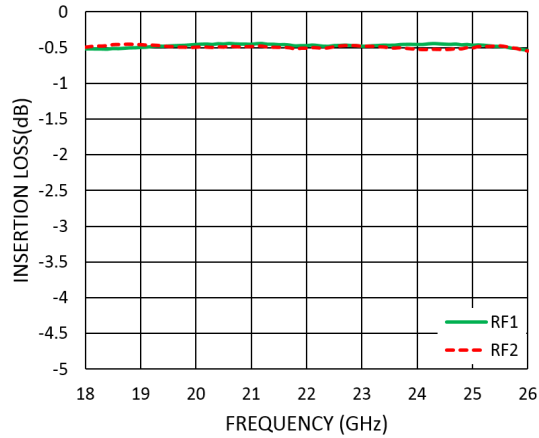
Insertion Loss vs. Frequency

TA = +25°C



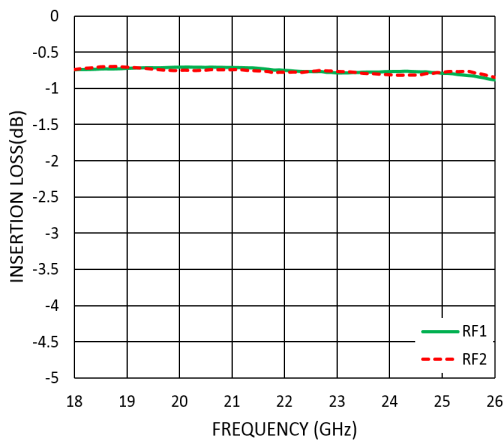
Insertion Loss vs. Frequency

TA = -40°C



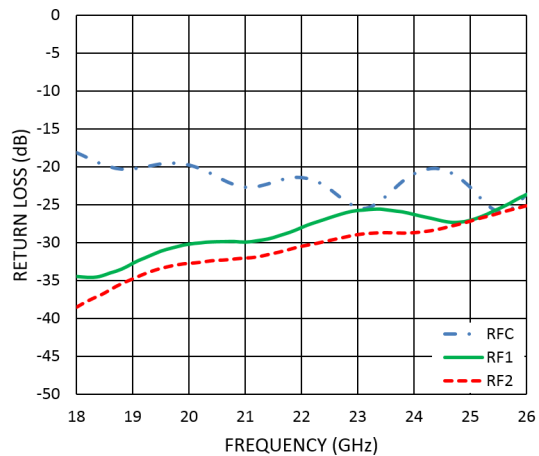
Insertion Loss vs. Frequency

TA = +85°C



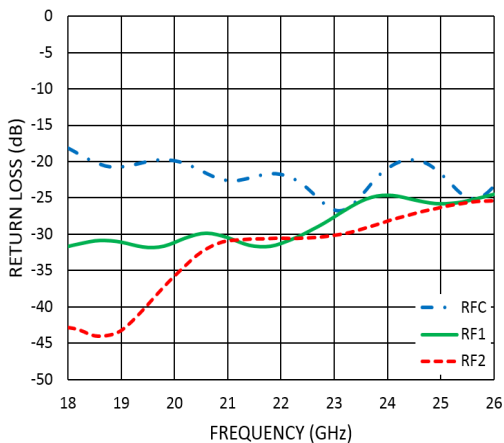
Return Loss vs. Frequency

TA = +25°C



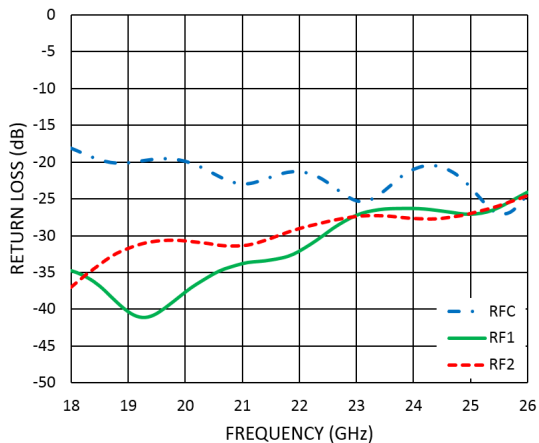
Return Loss vs. Frequency

TA = -40°C



Return Loss vs. Frequency

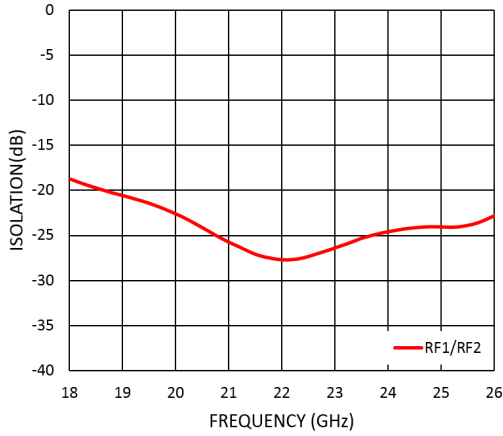
TA = +85°C





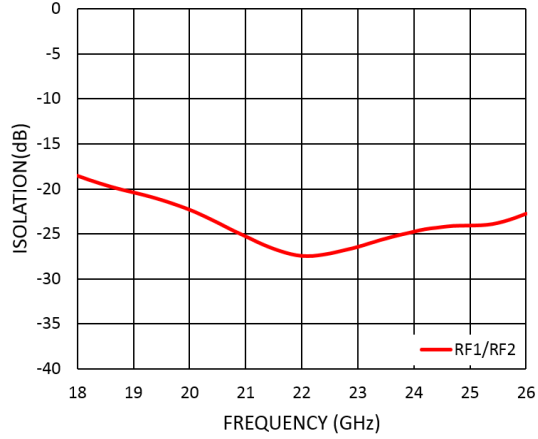
Isolation vs. Frequency

TA = +25°C



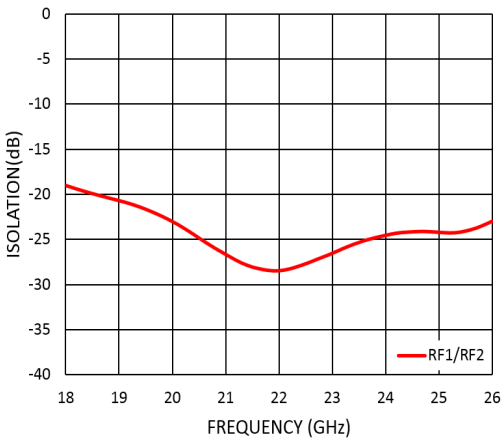
Isolation vs. Frequency

TA = -40°C



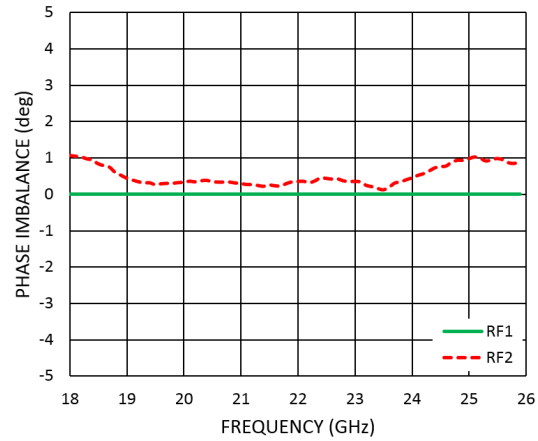
Isolation vs. Frequency

TA = +85°C



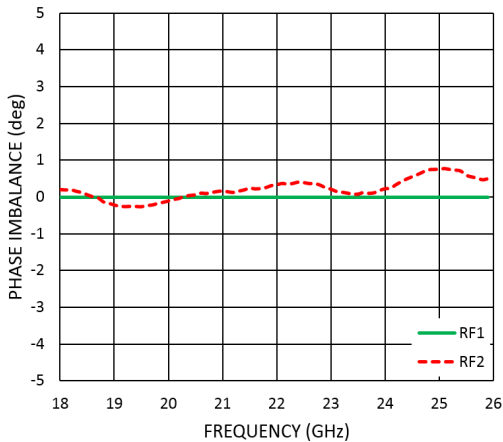
Phase Imbalance vs. Frequency

TA = +25°C



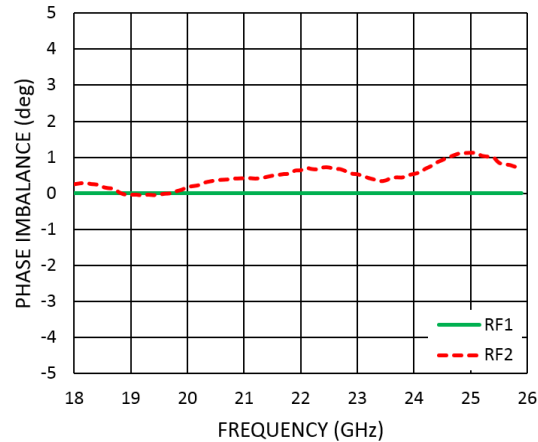
Phase Imbalance vs. Frequency

TA = -40°C



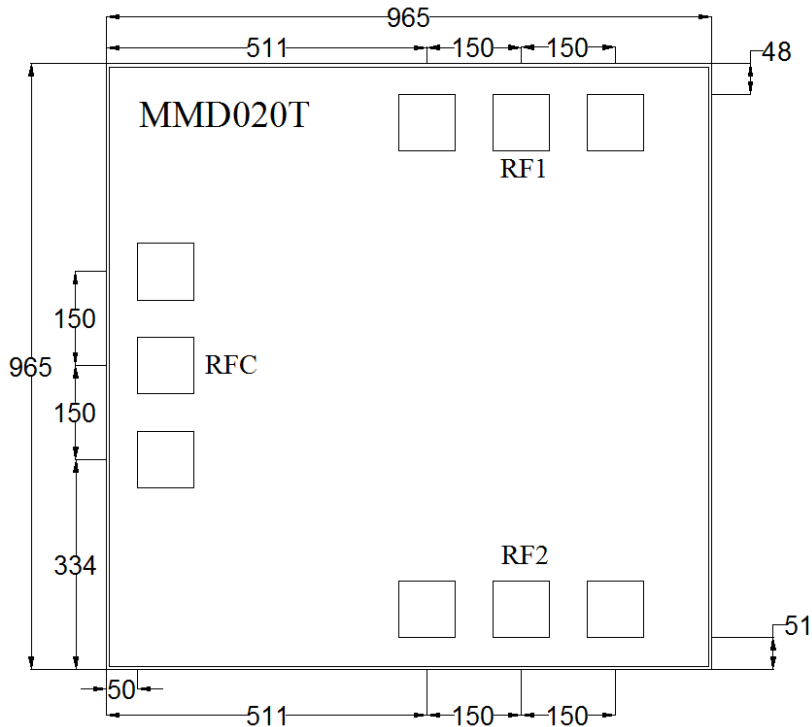
Phase Imbalance vs. Frequency

TA = +85°C





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: 100 μm
2. RF bond pad is 90*90 μm^2
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)

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