

Data Sheet

PD2275U03W

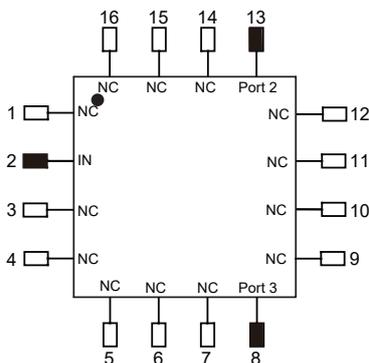
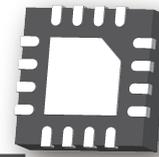
Power Divider/Combiner

2-Way 0° 50Ω 10-43.5 GHz



Features

- Small Size (3×3mm QFN package)
- Passive RF IC, no need external DC power supply
- No need external 100 Ω resistor
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Operating Temperature -40°C~85°C
- Power handling
 - 2 Watts as a divider
 - 0.5 Watts as a combiner



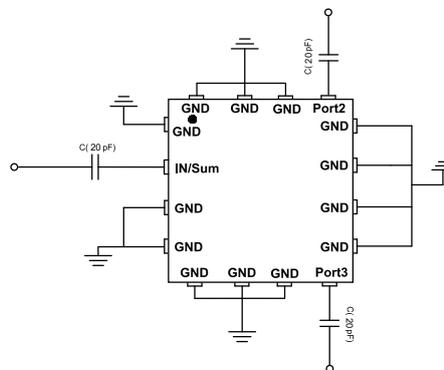
Applications

- Wireless communications
- WLAN / WiMax
- SAT Radio
- ISM band instrument
- Information System for Automotive Safety

Notes:

TOP VIEW

1. This part has passed through 100% RF test.
2. Suggest to add Capacitors of DC Blocker between Pins (with black color) and external circuit to prevent DC signal entry to guarantee parts normal work.
3. Suggest to add a TVS Diode in parallel between Electrode (with black color) and Capacitor of DC Blocker to provide ESD protection for the product. TVS Diode use ON Semiconductor's ESD9101 is recommended.



ESD Rating

Human Body Model (HBM): ≤ 450V in accordance with ANSI/ESD STM 5.1 - 2001

Machine Model (MM): ≤ 100V in accordance with ANSI/ESD STM 5.2 - 1999

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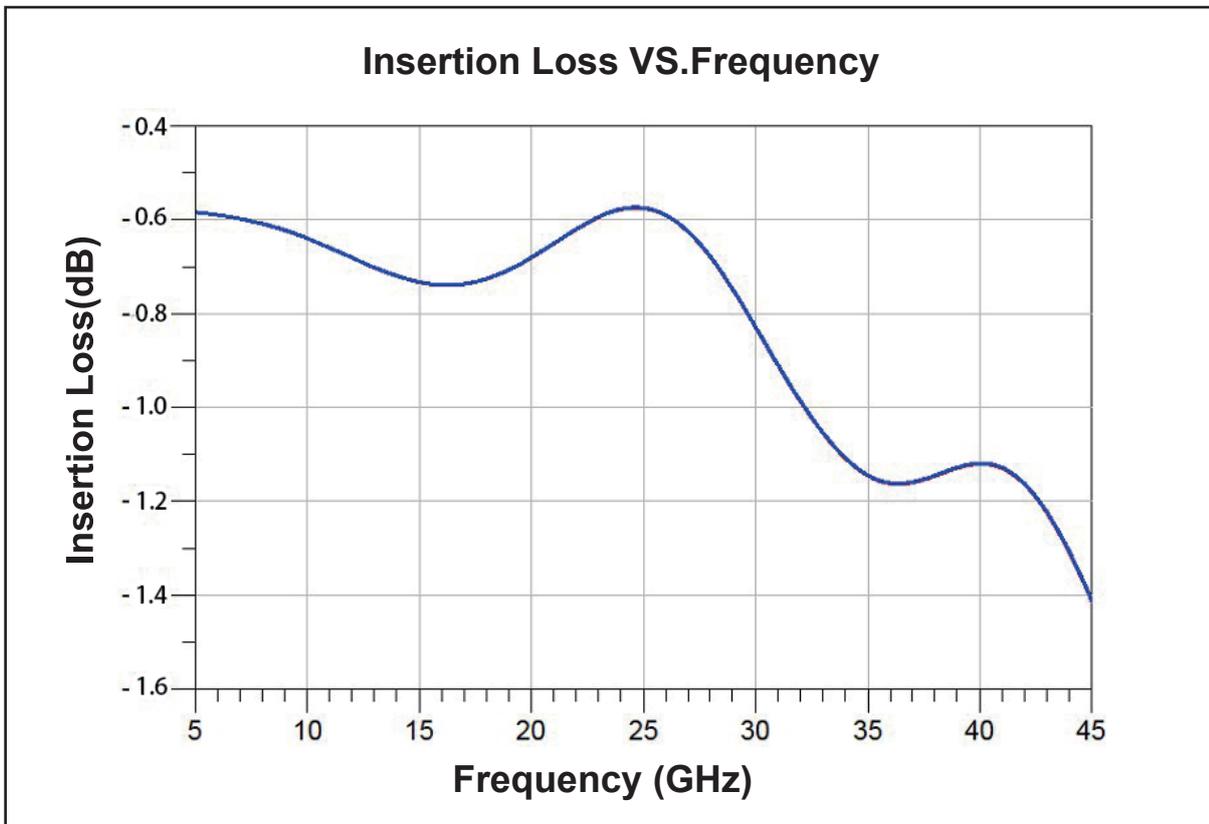
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Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	10000		43500	MHz
Insertion Loss (Above 3dB)	I_L		0.7	1.5	dB
Isolation	Isol	10	32.5		dB
Phase balance	\varnothing_{bal}		0.01	0.23	deg
Amplitude balance	A_{bal}		0.02	0.30	dB
IRL(S11)			-20.0	-10.0	dB
ORL(S22/S33)			-27.0	-10.0	dB

Typical Performance (25°C, : 10000-43500 MHz)

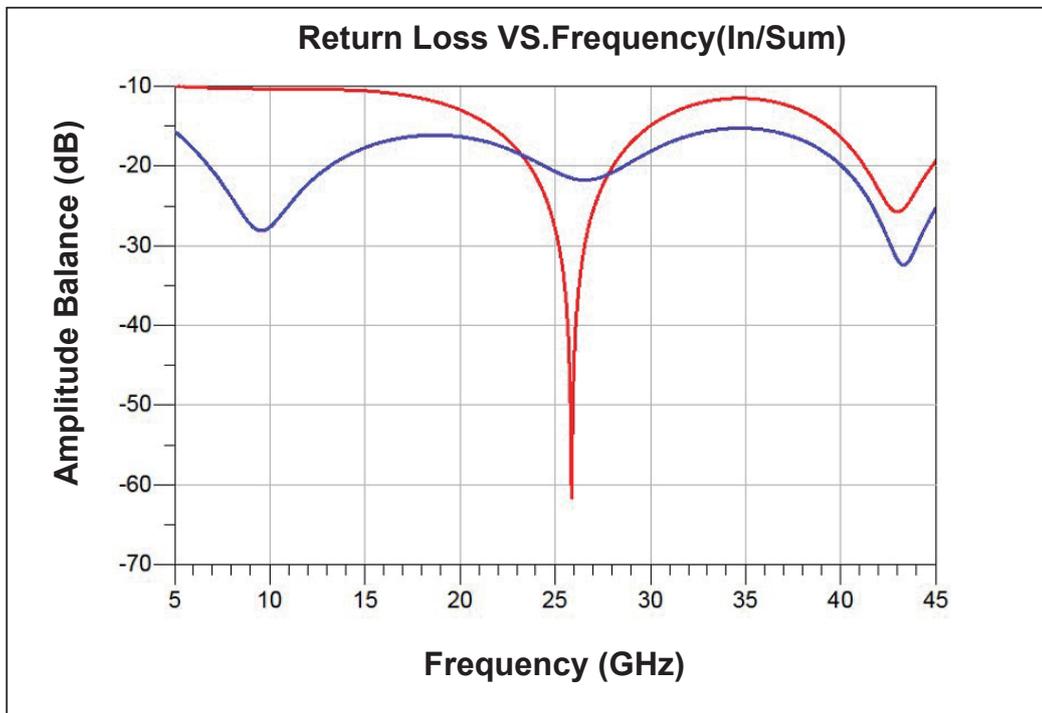
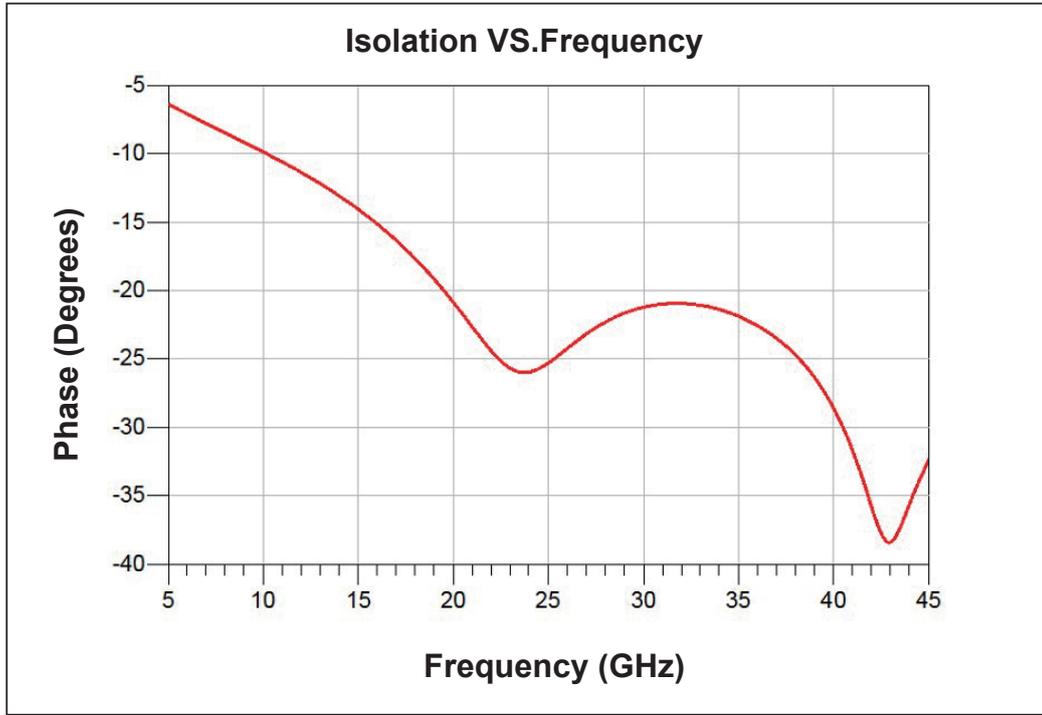


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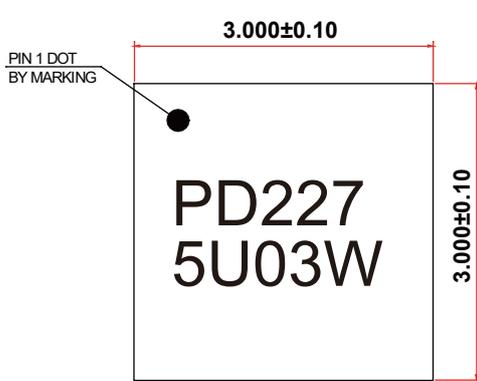


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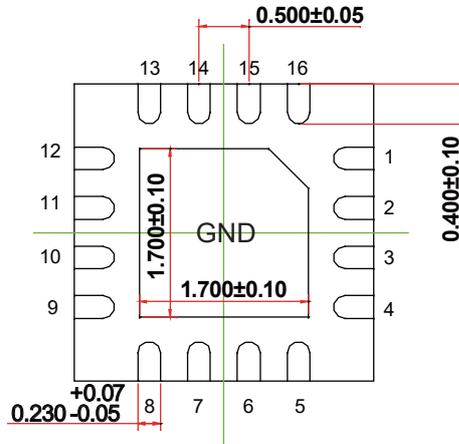
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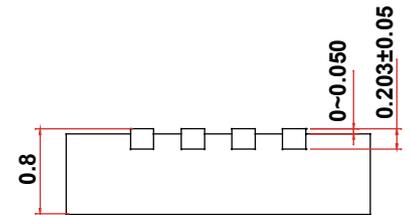
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TOP VIEW

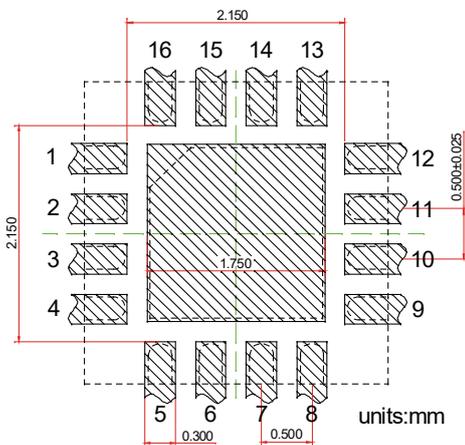


BOTTOM VIEW



SIDE VIEW

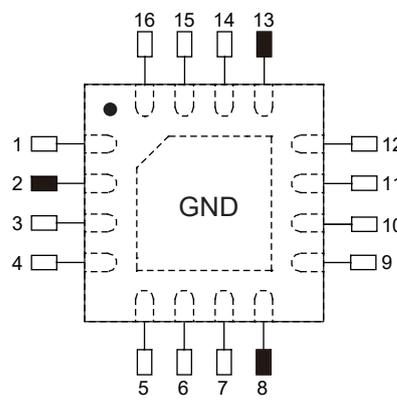
Land Pattern



Recommended Land Pattern
Top View

Notes: All dimensions show in millimeters

Pin Out



TOP VIEW

Notes:

1. Require to add Capacitors of DC Blocker between Pins (with black color) and external circuit to prevent DC signal entry to guarantee normal work.
2. This part has passed through 100% RF test.

Pin #	Connection
1	NC
2	PORT 1(IN/SUM)
3	NC
4	NC
5	NC
6	NC
7	NC
8	PORT 3
9	NC
10	NC
11	NC
12	NC
13	PORT 2
14	NC
15	NC
16	NC
Center Pad	GND