

Data Sheet

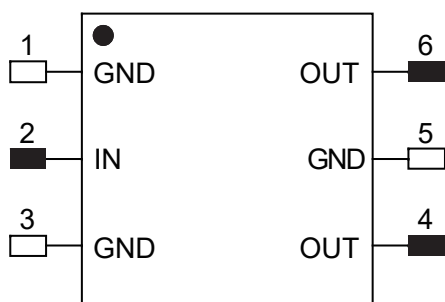
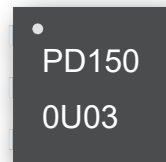
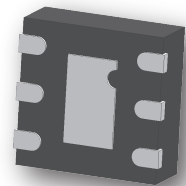
PD1500U03-140

Power Divider/Combiner
2-Way 0° 50Ω 1.0-2.0 GHz



Features

- Small Size (2×2mm DFN package)
- No need external 100 Ω resistor
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Operating Temperature -40°C~105°C
- Storage Temperature -65°C~150°C
- Power handling
 - 2 Watts as a divider
 - 1 Watts as a combiner



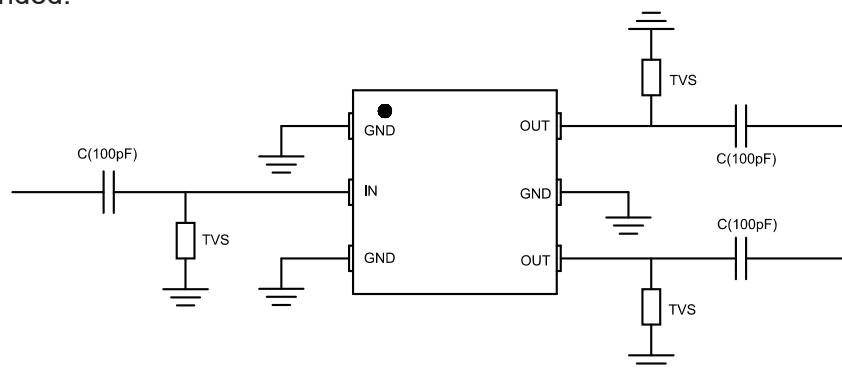
TOP VIEW

Applications

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

Notes:

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): Class 1 (≤ 800V) in accordance with ANSI/ESD STM 5.1 - 2001

Machine Model (MM): Class M1 (50 to ≤ 100V) in accordance with ANSI/ESD STM 5.2 - 1999

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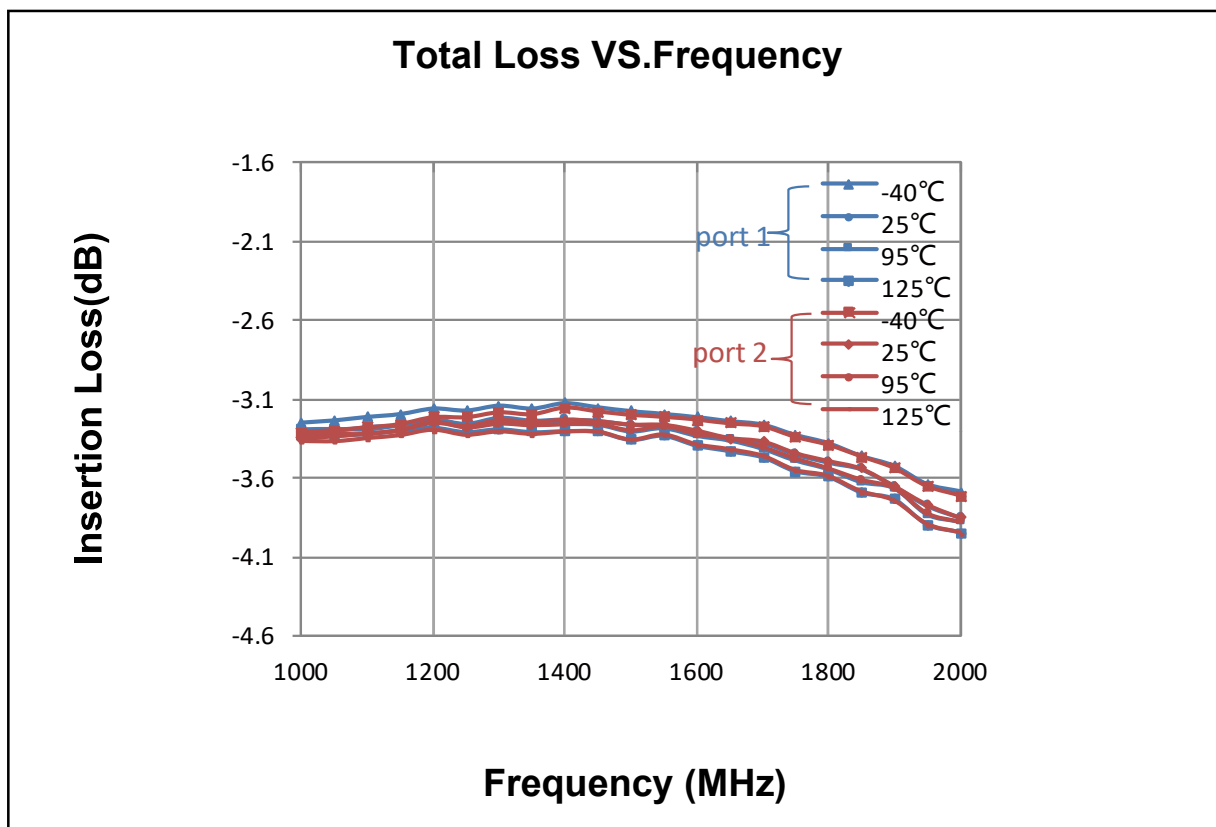
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Frequency	Isolation	Input Return Loss	Output Return Loss	Insertion Loss
<i>MHz</i>	<i>dB Min</i>	<i>(dB) Min</i>	<i>(dB) Min</i>	<i>(dB)Max</i>
1000-1100	11.5	14.5	15	0.4
1100-1350	13.5	16.0	17	0.4
1350-1650	17.0	15.5	22	0.35
1650-2000	9	8	18	1.0
Phase Balance	Amplitude Balance	Power	Operating Temp.	
<i>Degrees</i>	<i>dB Max</i>	<i>Avg. CW Watts at 105°C</i>	<i>°C</i>	
±1.00	± 0.10	2	-40 to +105	
±1.00	± 0.10	2	-40 to +105	
±1.20	± 0.10	2	-40 to +105	
±1.40	± 0.10	2	-40 to +105	

Notes: 1. All the above data are based on specified demo board.
2. Insertion loss: Thru board loss has been removed

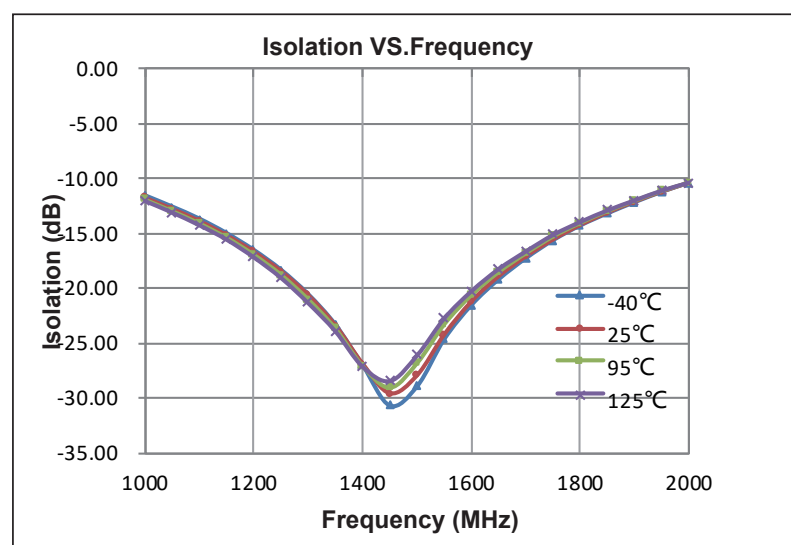
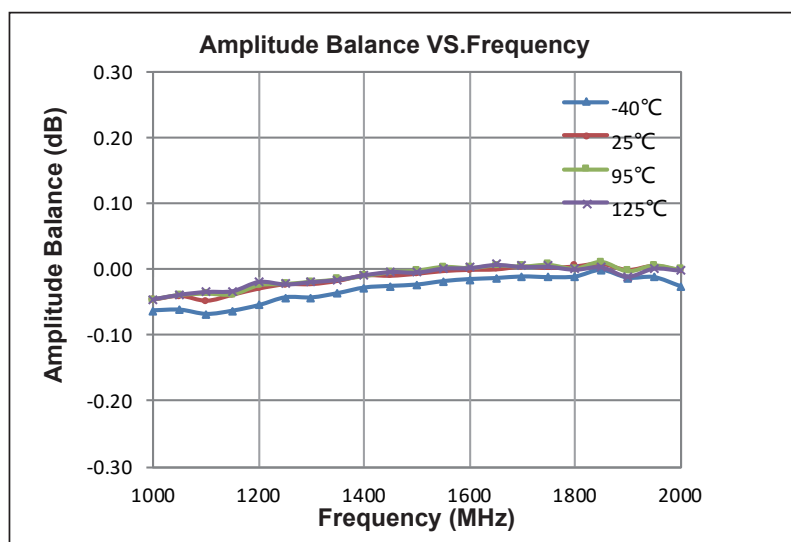
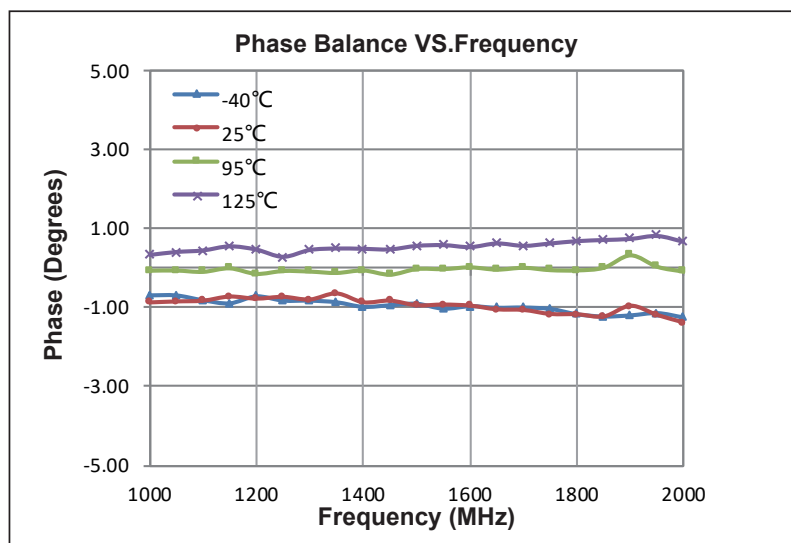
Typical Performance (-40°C, 25°C, 85°C, 125°C: 1000-2000 MHz)



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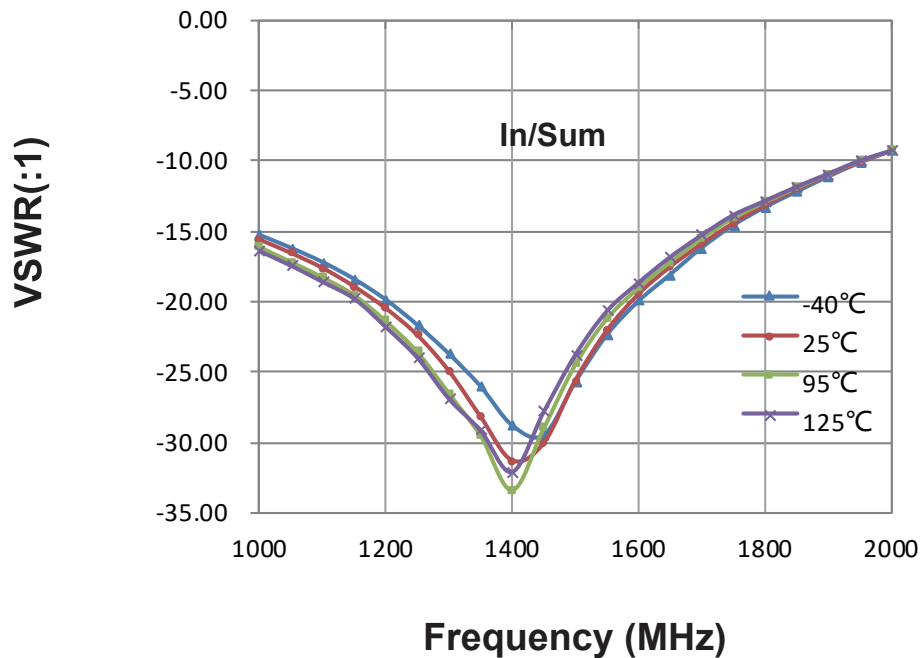
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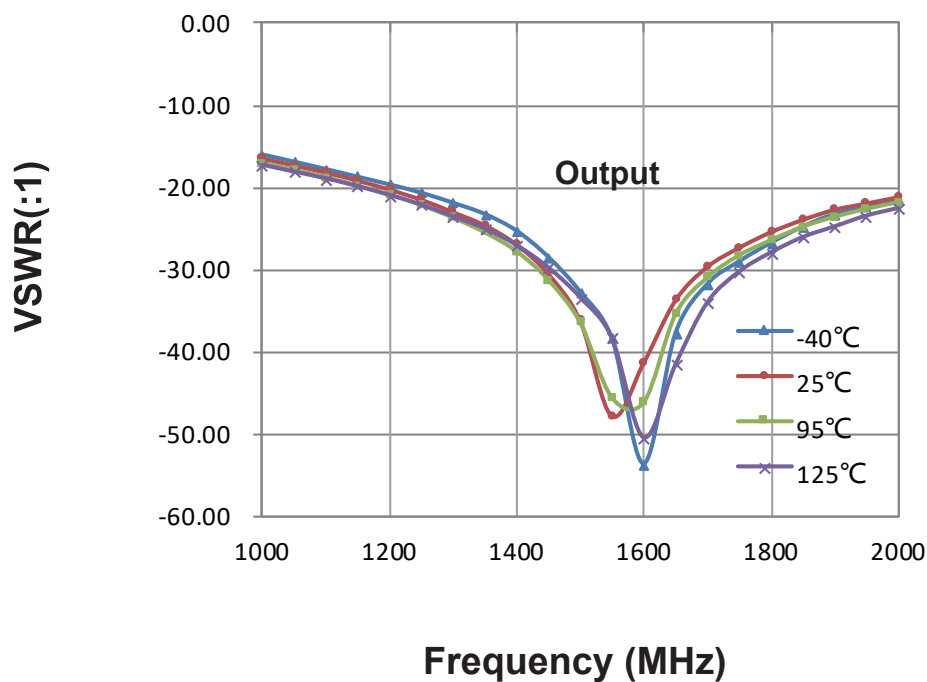
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Return Loss VS.Frequency



Return Loss VS.Frequency



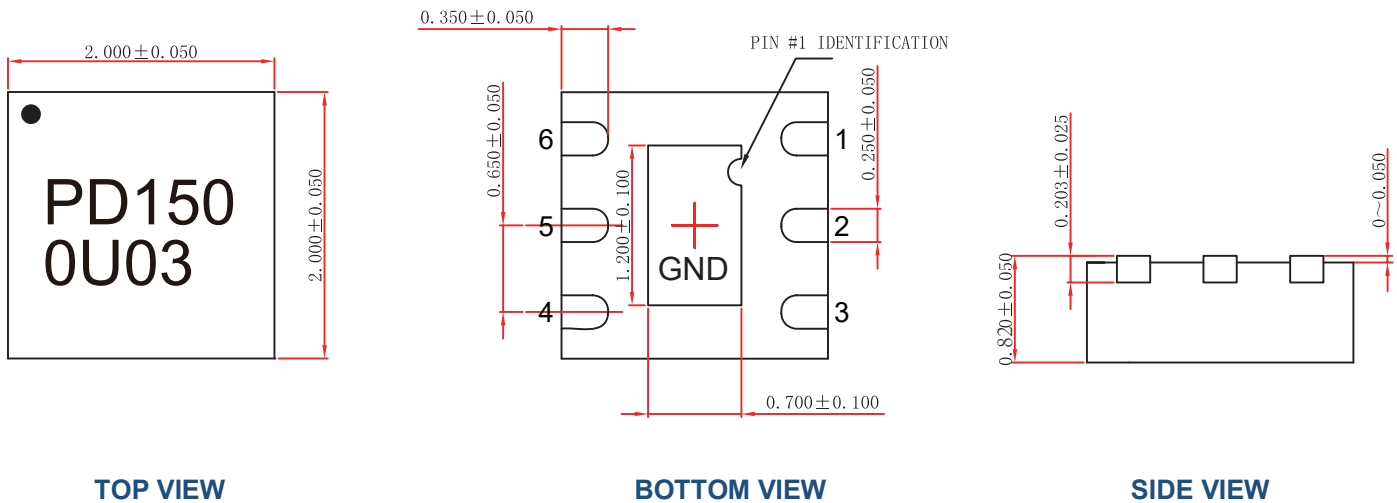
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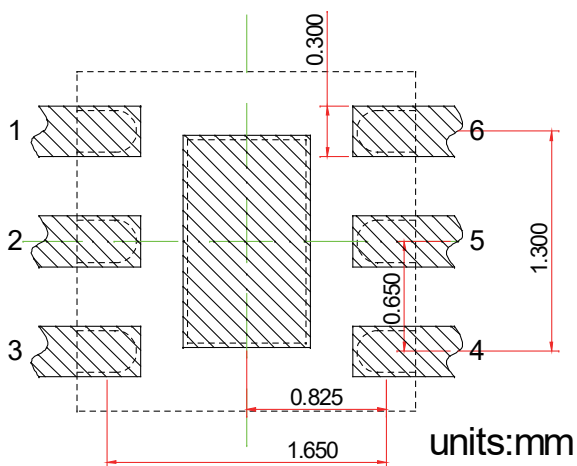
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Outline Drawing



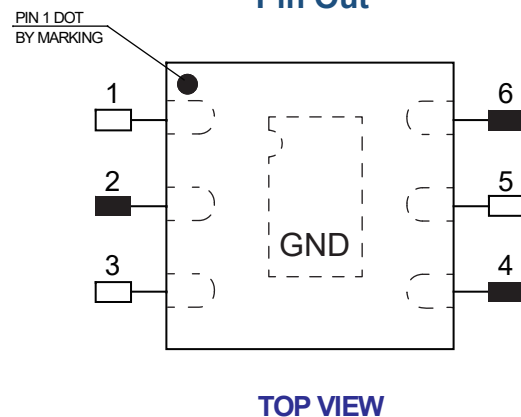
Land Pattern



Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

Pin Out



Notes:

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

Pin #	Connection
1	GND
2	IN
3	GND
4	OUT
5	GND
6	OUT
Center Pad	GND