

# Data Sheet

## PD1500U03-140

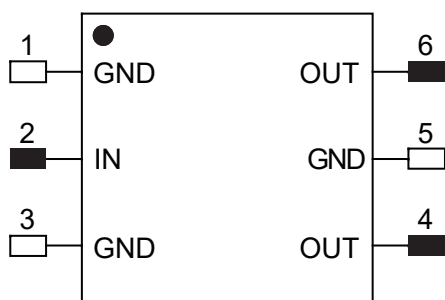
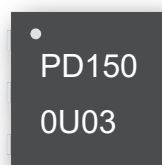
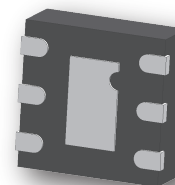
### Power Divider/Combiner

#### 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



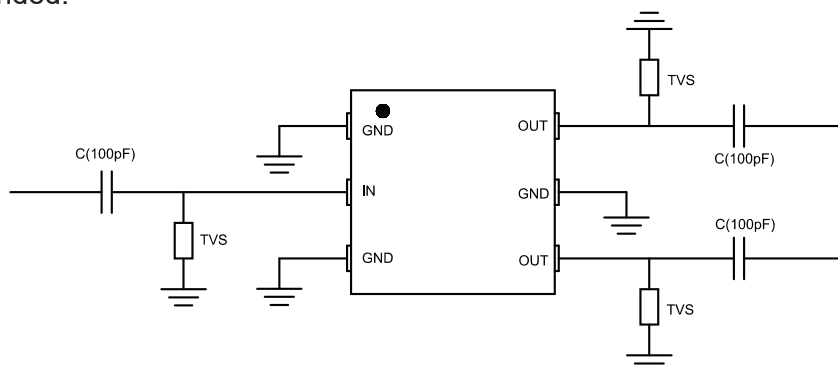
TOP VIEW

### 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 ( $\leq 800V$ ) in accordance with ANSI/ESD STM 5.1 - 2001  
 Machine Model (MM): Class M1 (50 to  $\leq 100V$ ) in accordance with ANSI/ESD STM 5.2 - 1999

### Yantel Corporation

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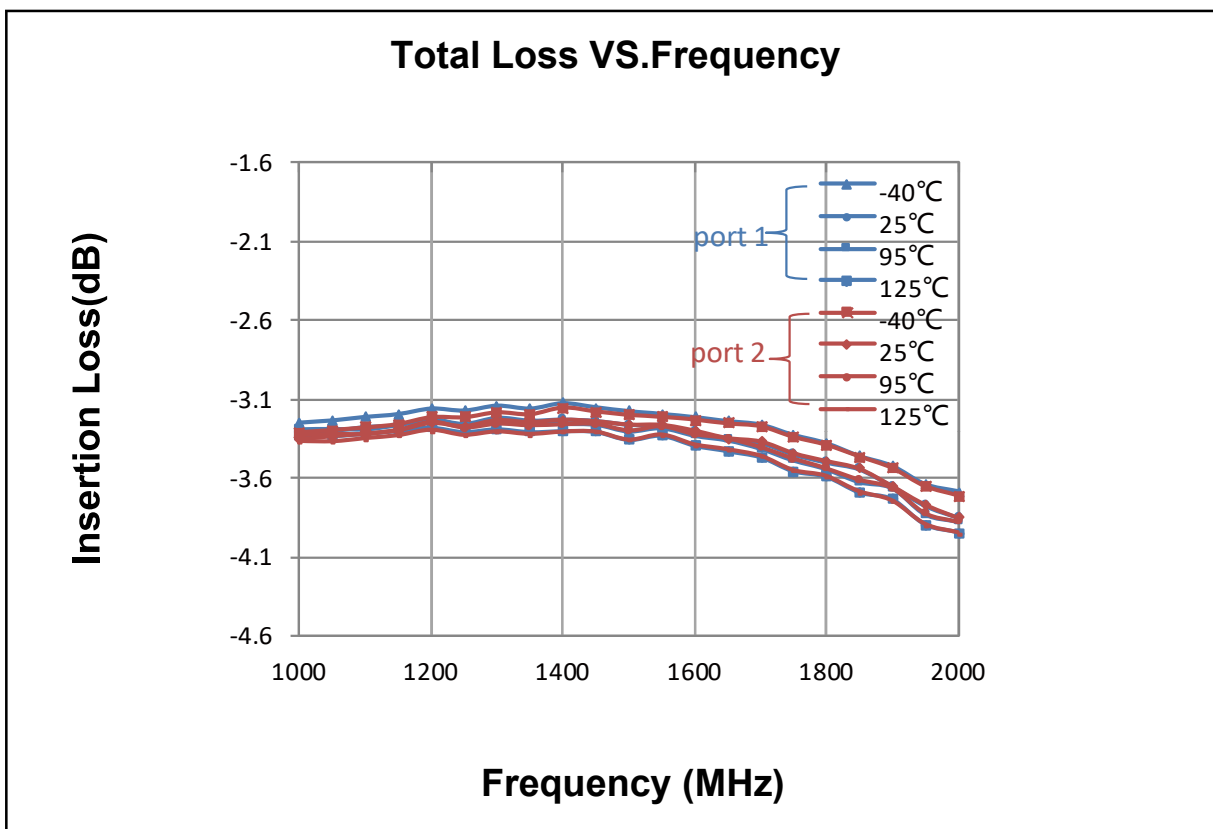
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Frequency <i>MHz</i>	Isolation <i>dB Min</i>	Input Return Loss <i>(dB) Min</i>	Output Return Loss <i>(dB) Min</i>	Insertion Loss <i>(dB)Max</i>
1000-1100	11.5	14.5	15	0.4
1100-1350	13.5	16.0	17	0.4
1350-1650	17.0	15.5	22	0.35
1650-2000	9	8	18	1.0
Phase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



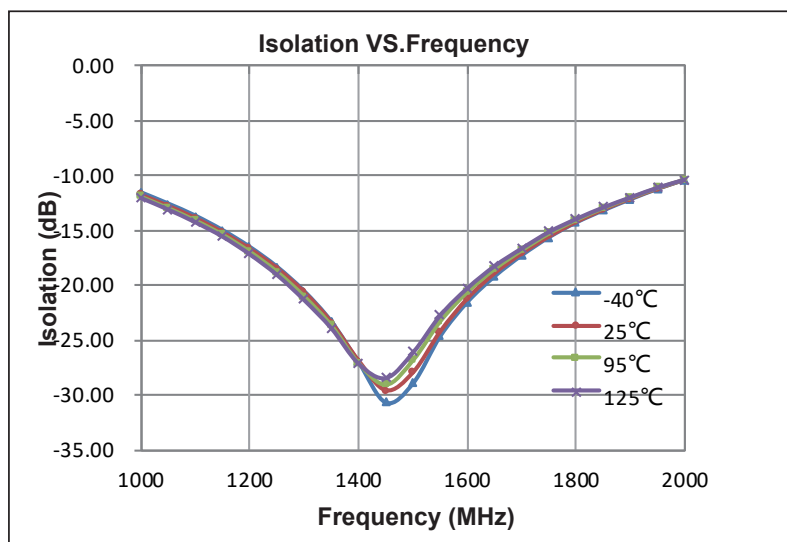
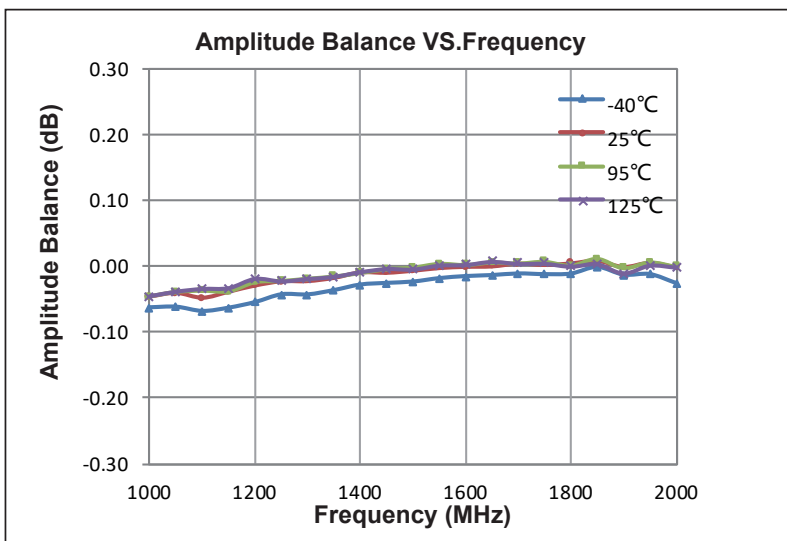
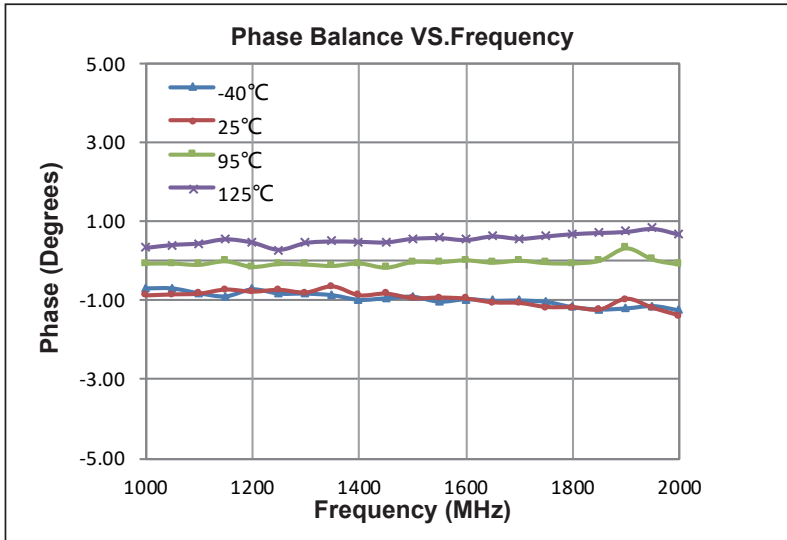
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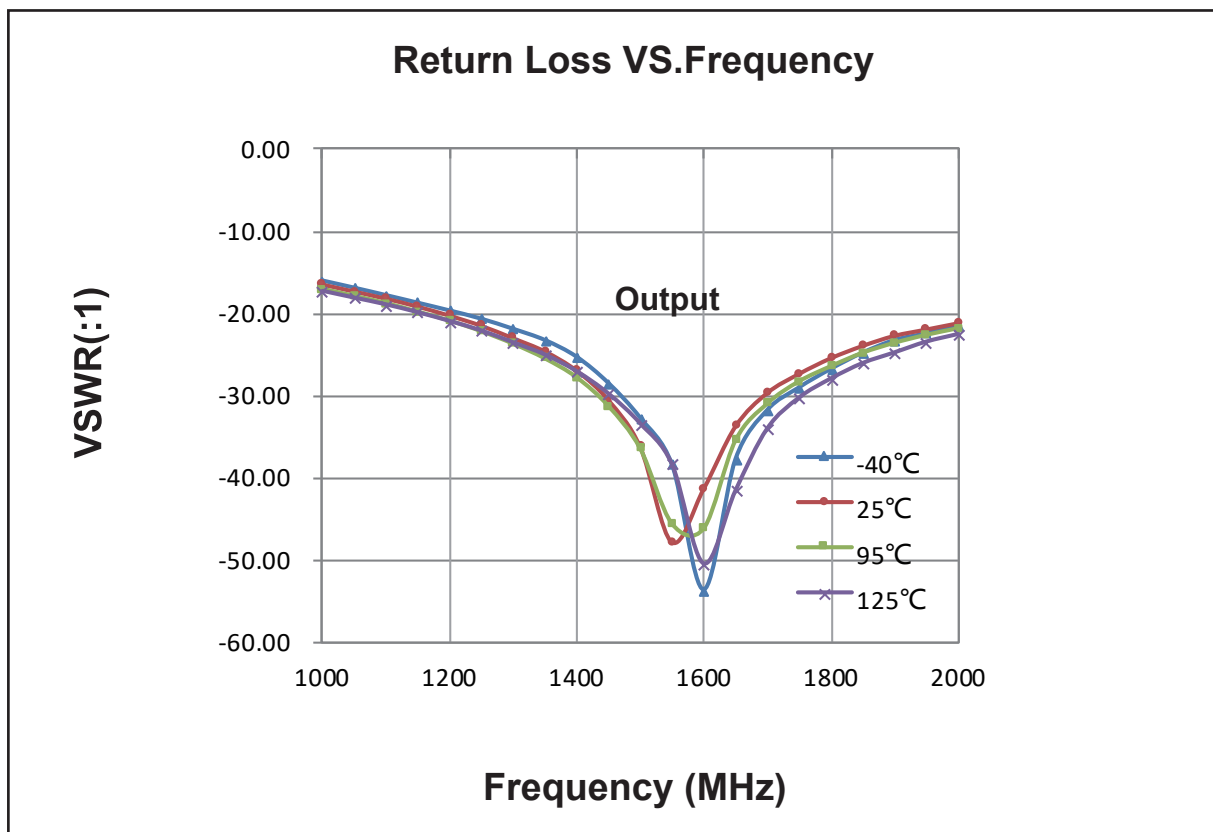
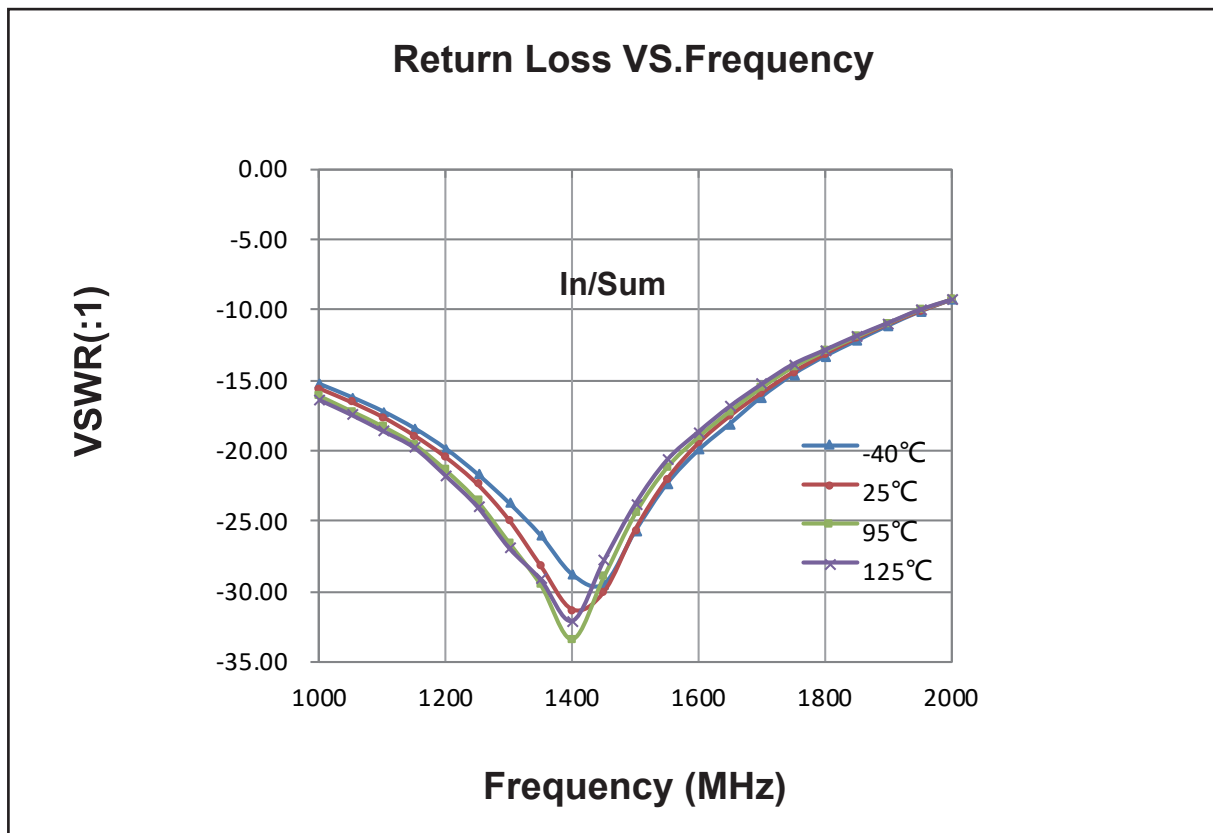
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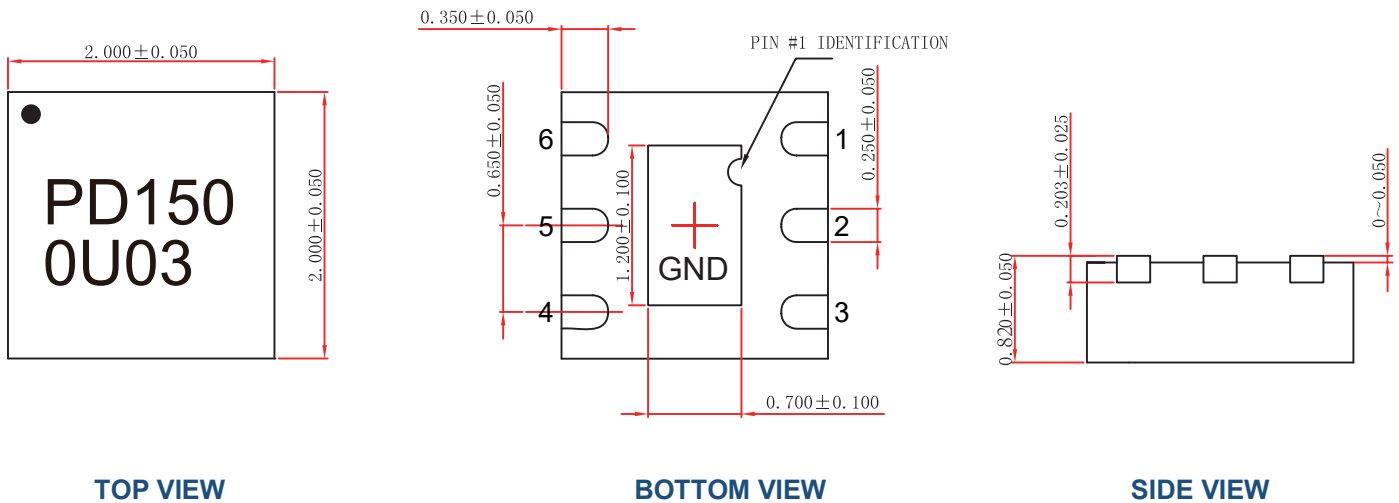
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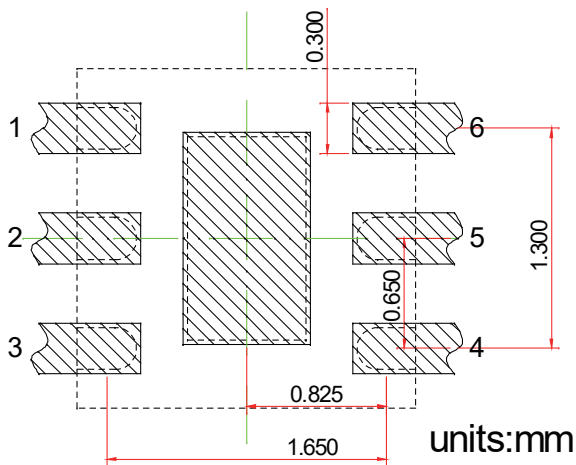
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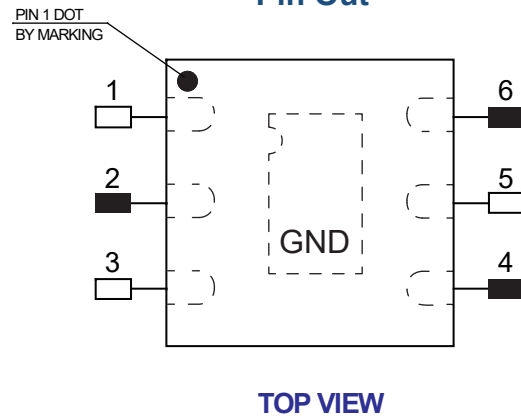
### Outline Drawing



### Land Pattern



### 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 guarantee parts normal work.
2. This part has passed through 100% RF test.

### Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

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

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