

Data Sheet

PD1700U03W

Power Divider/Combiner

2-Way 0° 50Ω 0.6-2.9 GHz

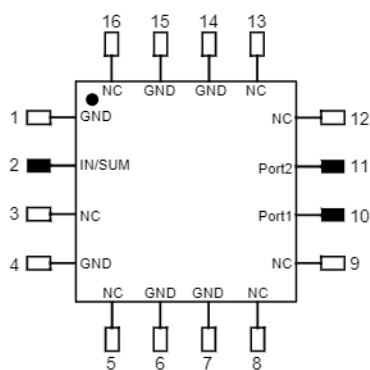
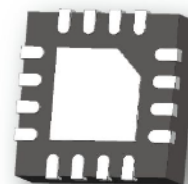


Features

- Small Size (3×3mm QFN 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~85°C

Power handling

- 2.0 Watts as a divider
- 1.0Watts as a combiner



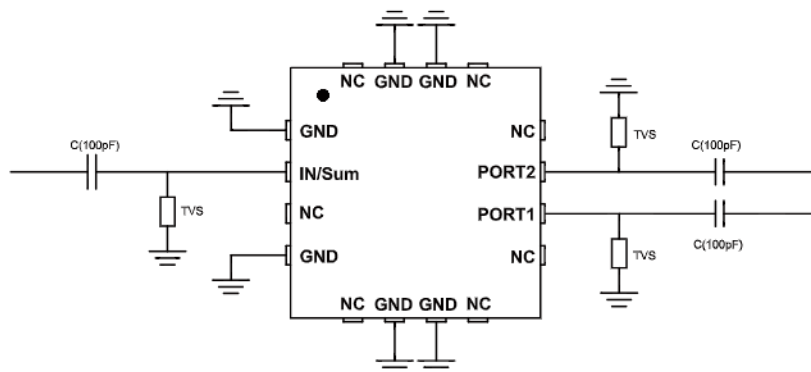
TOP VIEW

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

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

Yantel Corporation

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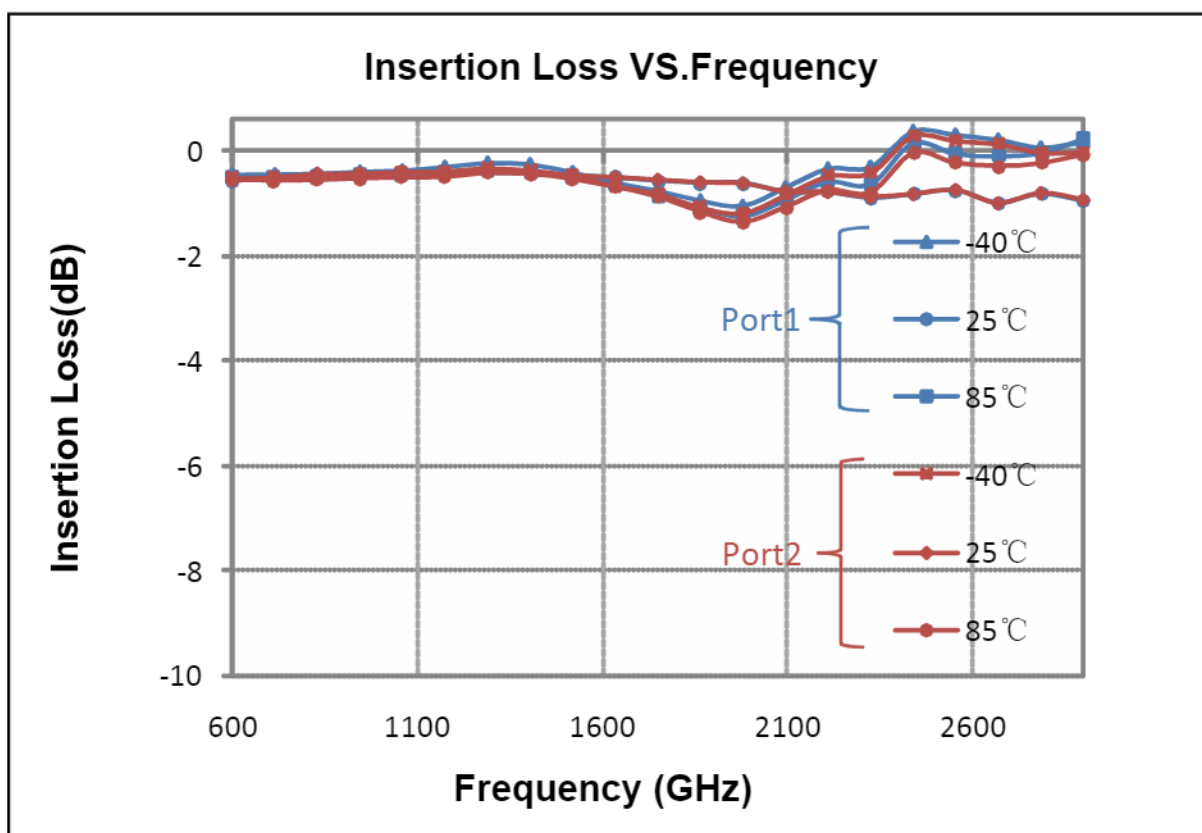
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Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	600		2900	MHz
Insertion Loss (Above 3dB)	I_L		0.85	0.85	dB
Isolation	Isol	10	15		dB
Phase balance	ϕ_{bal}		1.0	3.5	deg
Amplitude balance	A_{bal}		± 0.05	± 0.15	dB
Input VSWR			1.25	1.8	
Output VSWR			1.4	1.8	

Typical Performance (-40°C, 25°C, 85°C, 125°C: 600-2900 MHz)



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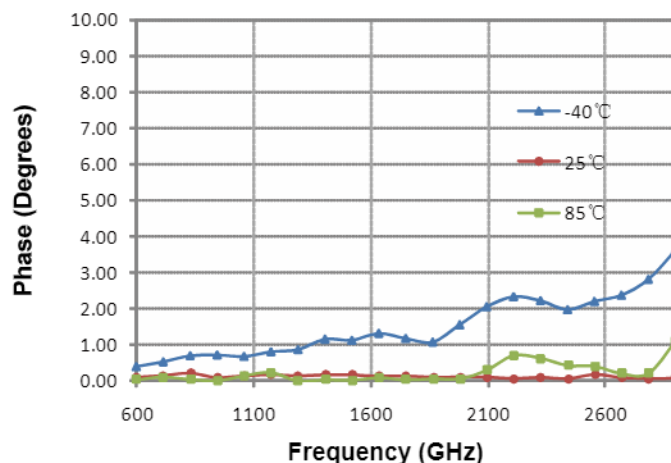
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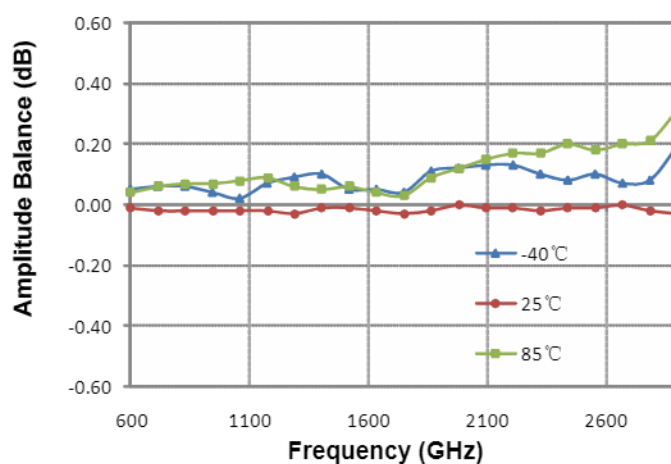
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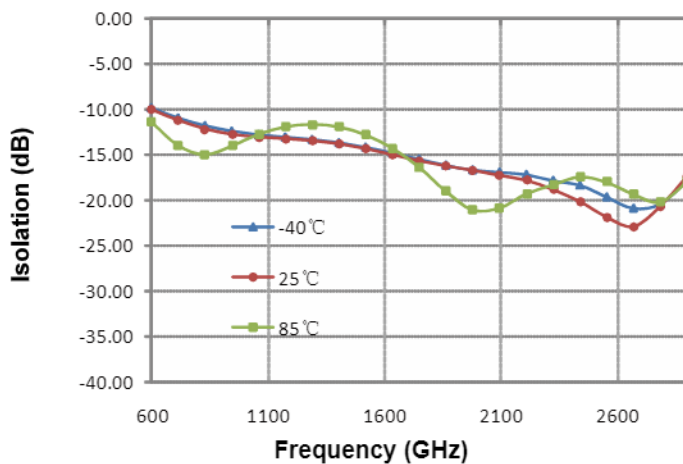
Phase Balance VS.Frequency



Amplitude Balance VS.Frequency



Isolation VS.Frequency



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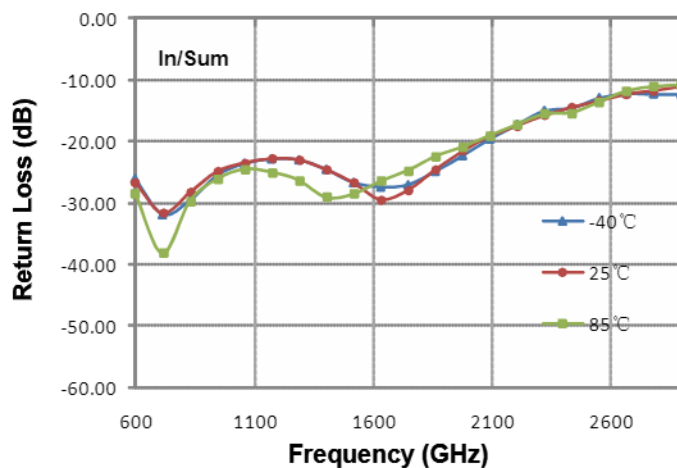
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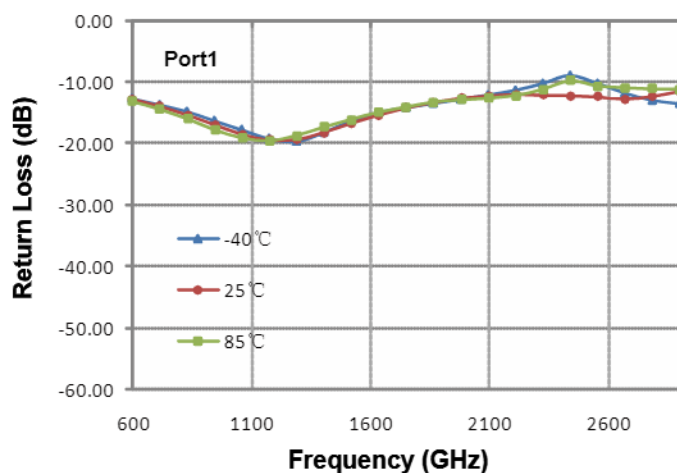
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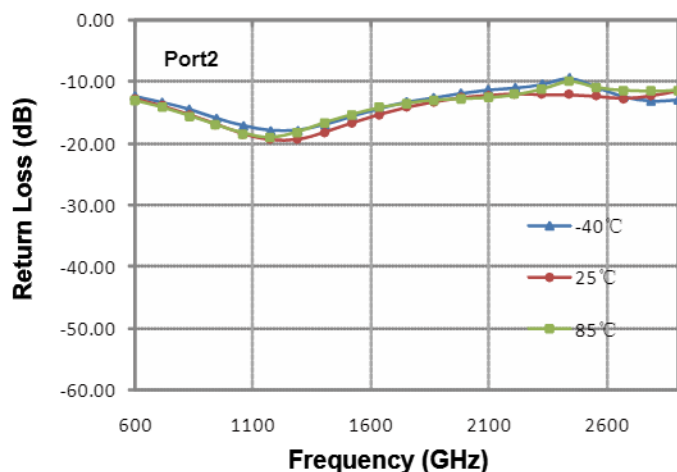
Return Loss VS.Frequency(In/Sum)



Return Loss VS.Frequency(Port1)



Return Loss VS.Frequency(Port2)



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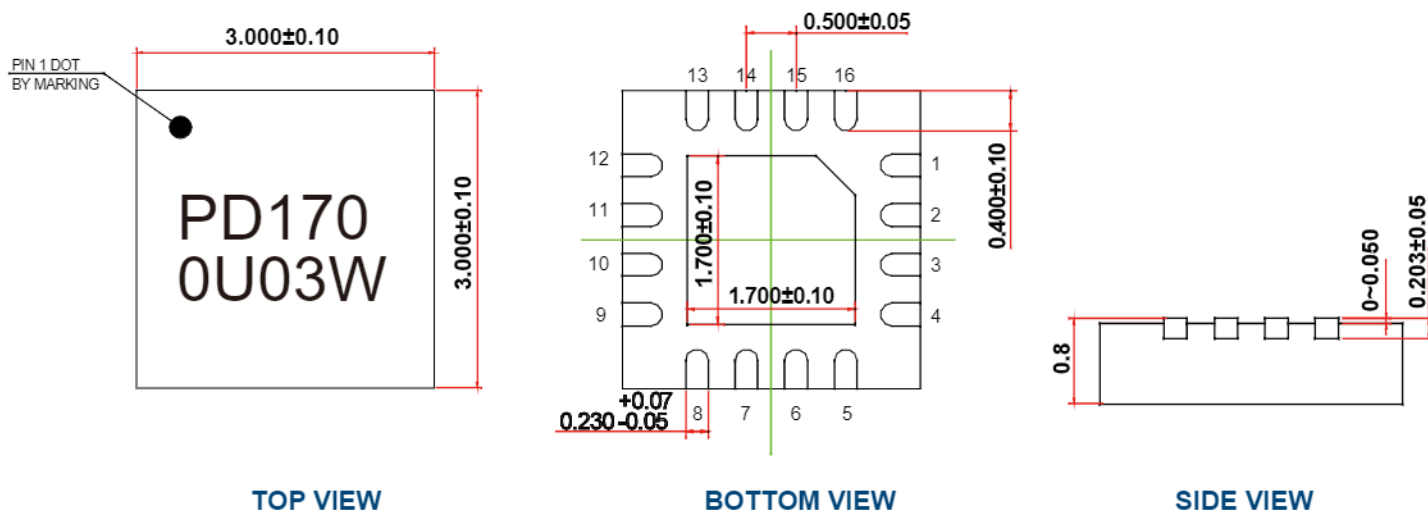
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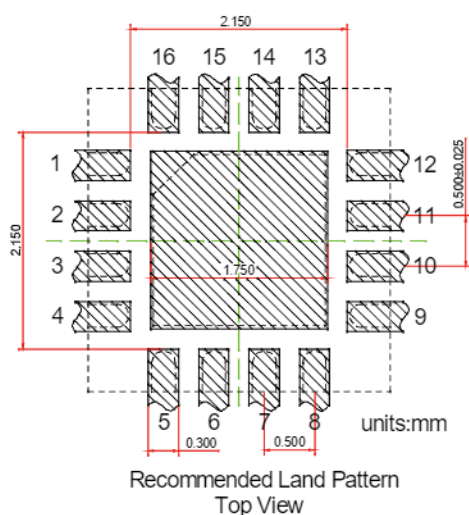
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Outline Drawing

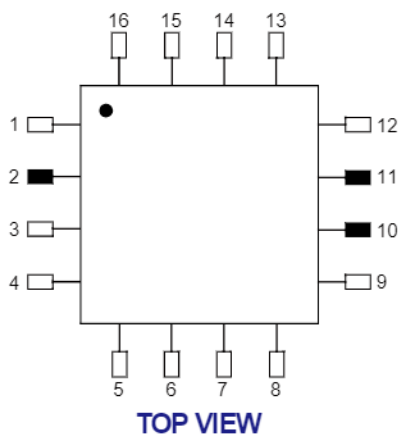


Land Pattern



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

Pin #	Connection
1	GND
2	IN/SUM
3	NC
4	GND
5	NC
6	GND
7	GND
8	NC
9	NC
10	PORT1
11	PORT2
12	NC
13	NC
14	GND
15	GND
16	NC
Center Pad	GND

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