

# Data Sheet

## PD220U06-170

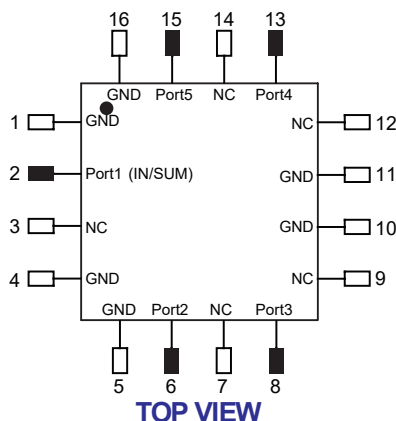
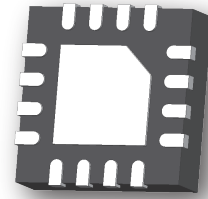
Power Divider/Combiner

4-Way 0° 50Ω 1.70-2.70 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 -55°C~85°C
- Power handling
  - 2 Watts as a divider
  - 0.5 Watts as a combiner



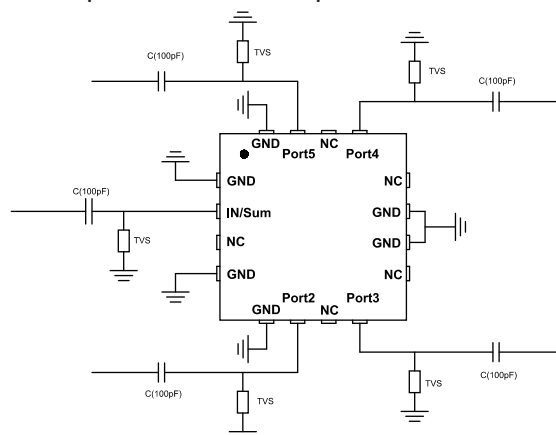
TOP VIEW

### 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): ≤ 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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## PD2200U06-170

### Power Divider/Combiner

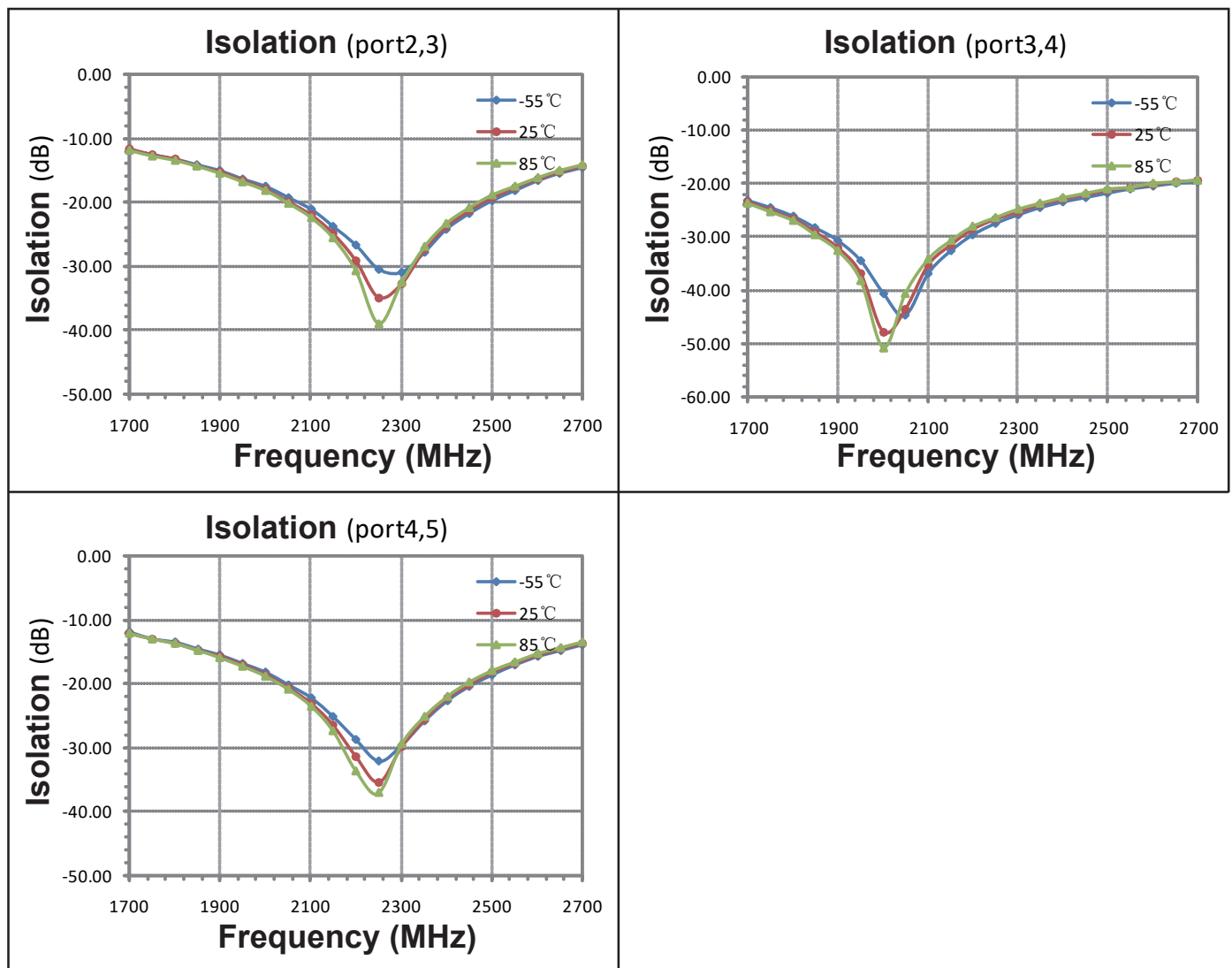
#### 4-Way 0° 50Ω 1.70-2.70 GHz



#### Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	1700		2700	MHz
Insertion Loss (Above 6dB)	I <sub>L</sub>	0.35	0.55	0.75	dB
Isolation	Isol	11		48	dB
Phase balance	∅ <sub>bal</sub>		3		deg
Amplitude balance	A <sub>bal</sub>		0.4~0.9		dB
Input VSWR			1.15~1.8		:1
Output VSWR			1.15~1.7		:1

#### Typical Performance (-55°C, 25°C, 85°C: 1.7-2.7 GHz)



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Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen China

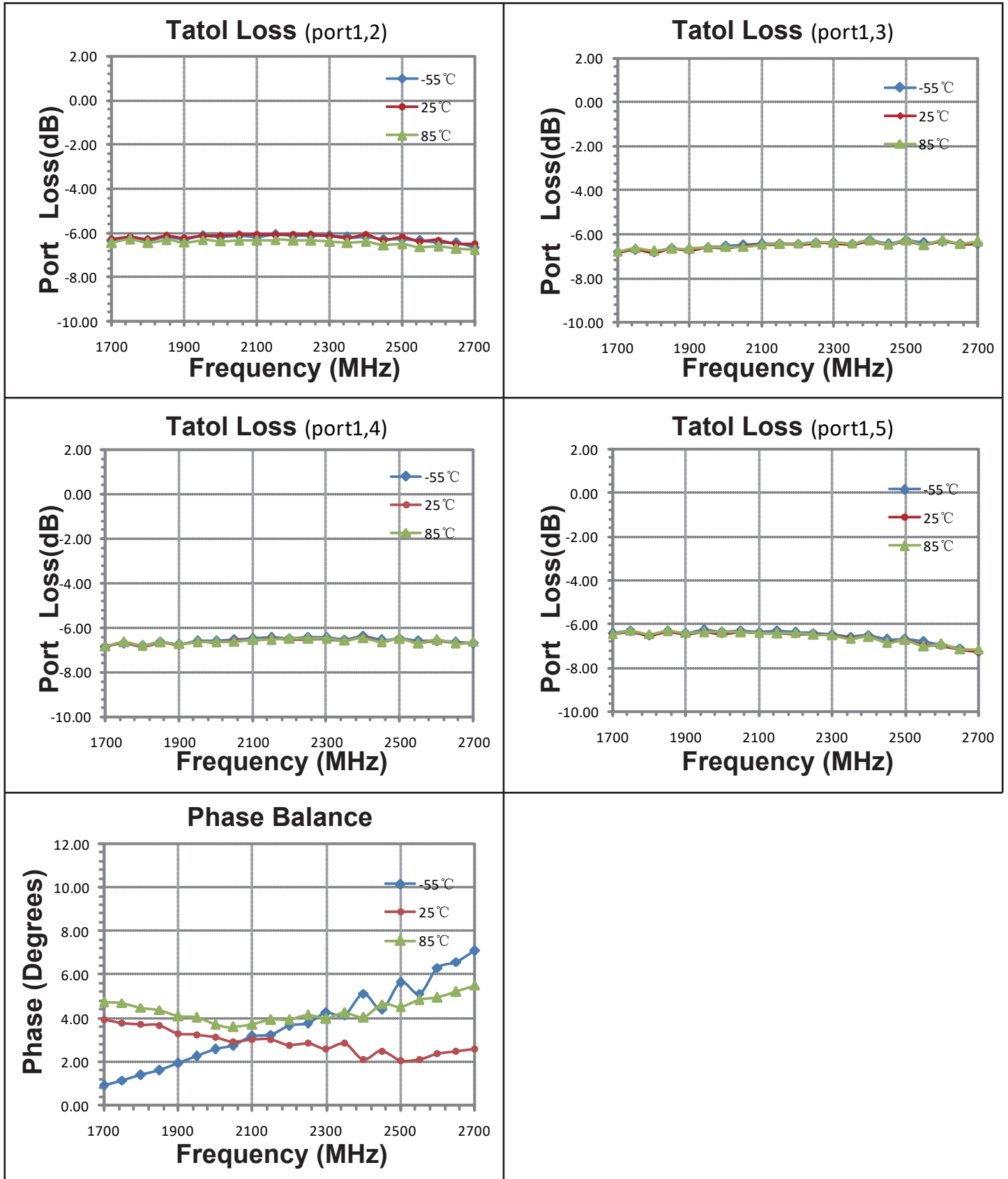
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

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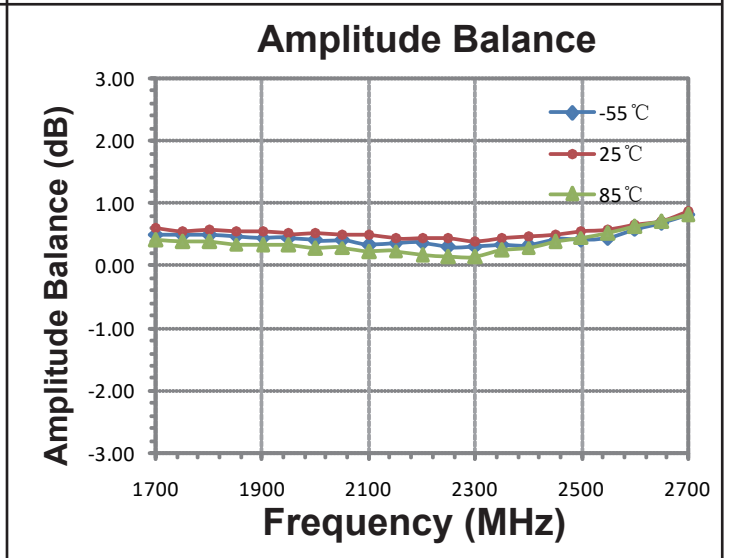
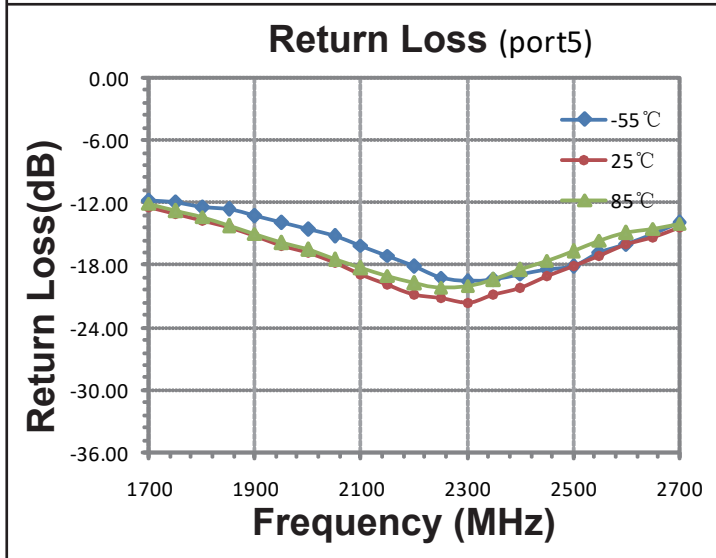
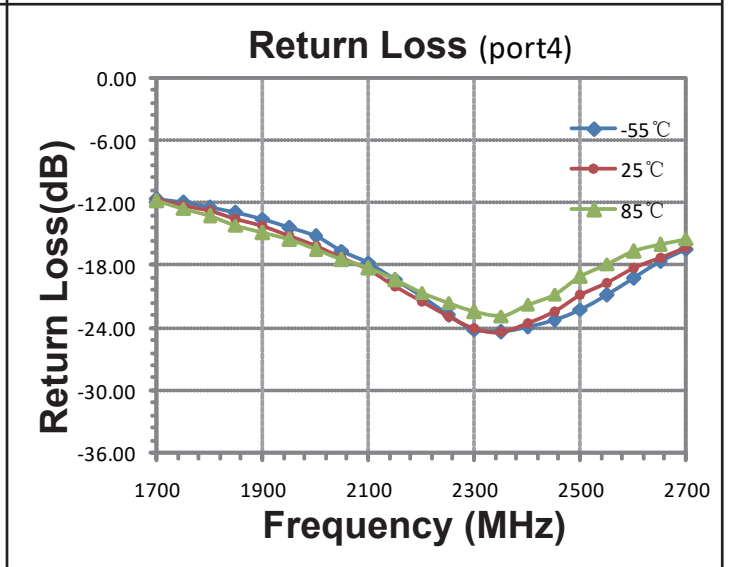
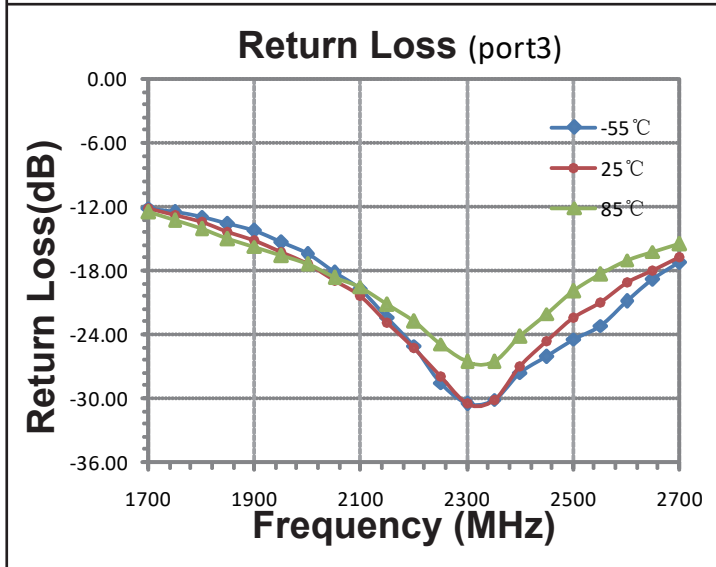
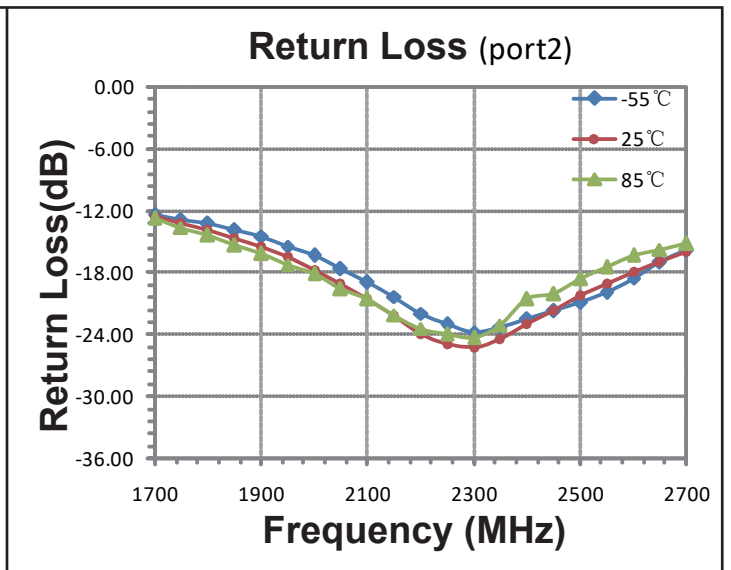
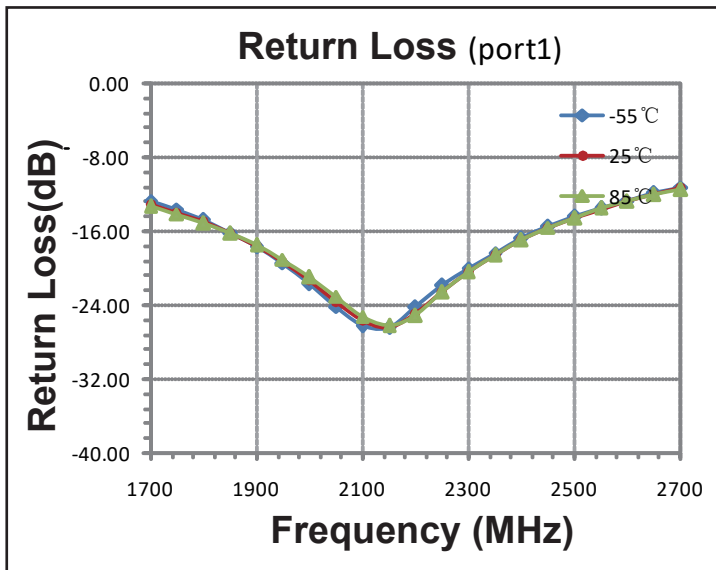


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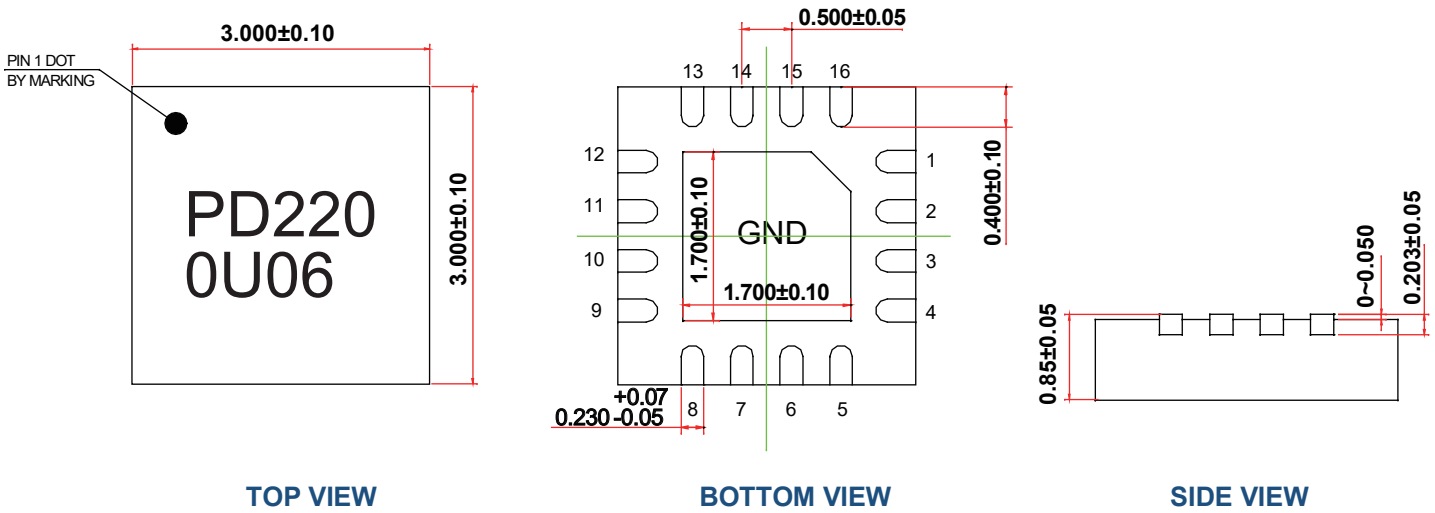
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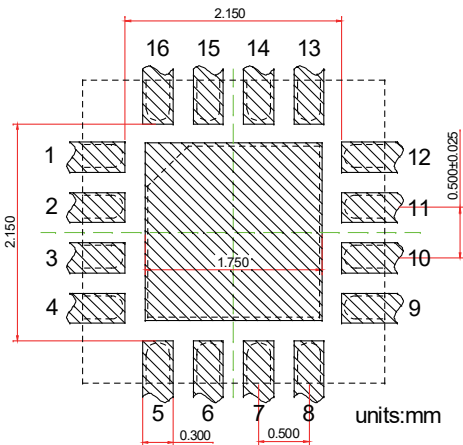
#### 4-Way 0° 50Ω 1.70-2.70 GHz



### Outline Drawing

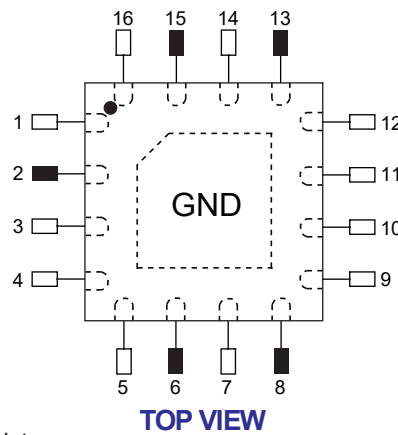


### Land Pattern



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

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