

PD5500U05

Preliminary Datasheet

Power Divider/Combiner

3-Way 0° 50Ω 4.4-6GHz



Rev A1.0

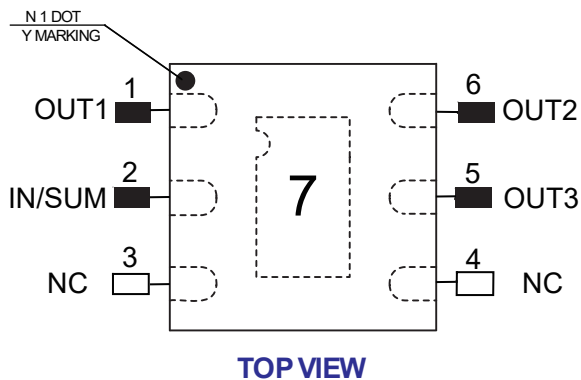
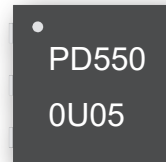
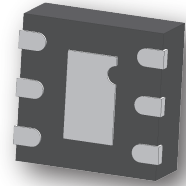
Features

- Small Size (2×2mm DFN package)
- GaAs
- No need external 100 Ω resistor
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- High ESD level*

Operating Temperature -40°C~105°C

Power handling

- 2.5 Watts as a divider
- 0.8 Watts as a combiner



Applications

- WIMAX
- ISM
- Instrumentation
- Radar
- Satellite communications
- 5G

Notes:

1. This part has passed through 100% RF test.

* ESD rating

Human body model (HBM): Class 2 (2000 to <4000V) in accordance with ANSI/ESD 5.1-2007

Machine model: Class M3 (200 to <4000V) in accordance with ANSI/ESD 5.2-2009

Yantel Corporation

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

Rev A1.0

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

PD5500U05

Preliminary Datasheet

Power Divider/Combiner

3-Way 0° 50Ω 4.4-6GHz

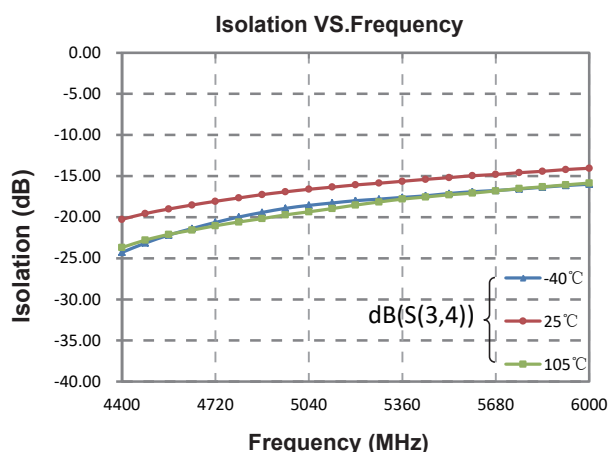
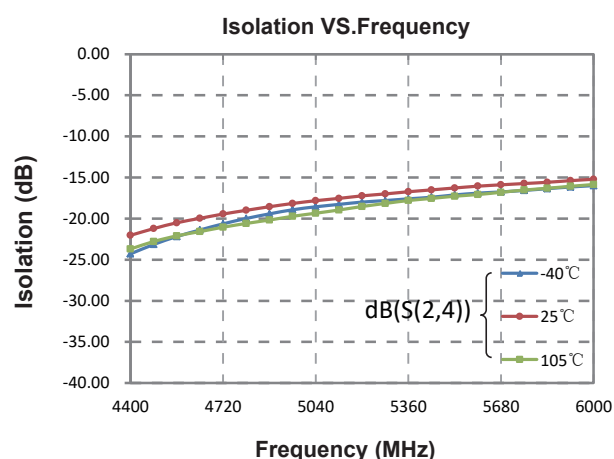
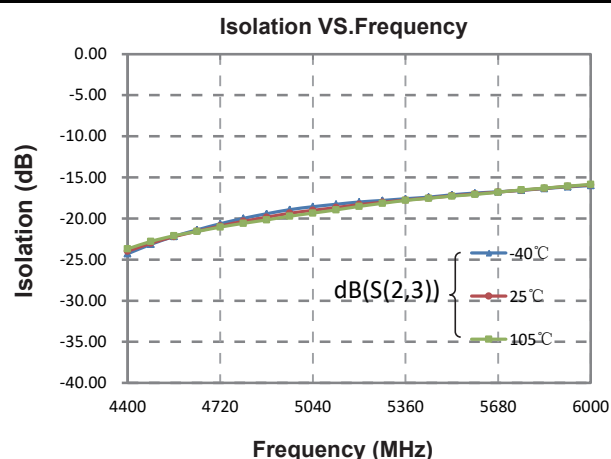


Rev A1.0

Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	4.4		6.0	GHz
Insertion Loss (Above 5dB)	I_L		0.3	0.85	dB
Isolation	Isol	13	25		dB
Phase balance	ϕ_{bal}		5.0	16.0	deg
Amplitude balance	A_{bal}		± 0.25	± 0.60	dB
Input VSWR			1.40	1.70	
Output VSWR			1.30	1.70	

Typical Performance (-40°C, 25°C, 105°C: 4.4-6.0GHz)



Yantel Corporation

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

Rev A1.0

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

PD5500U05

Preliminary Datasheet

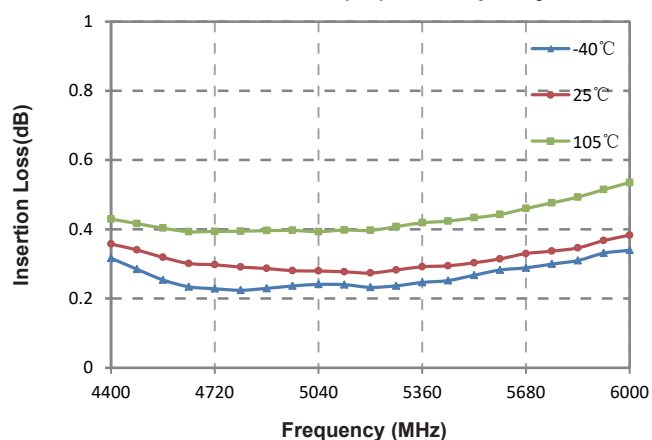
Power Divider/Combiner

3-Way 0° 50Ω 4.4-6GHz

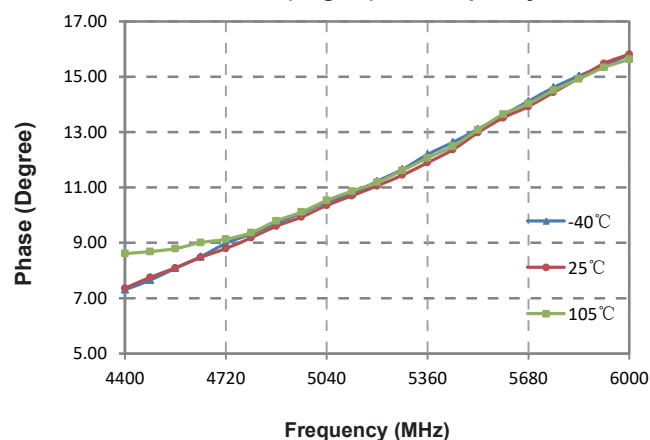


Rev A1.0

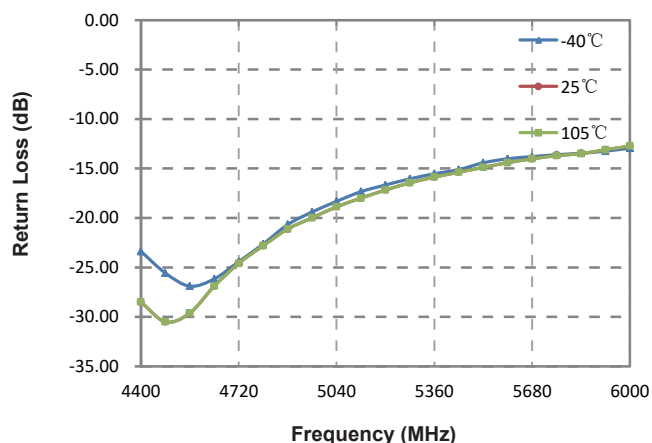
Insertion Loss(dB) VS.Frequency



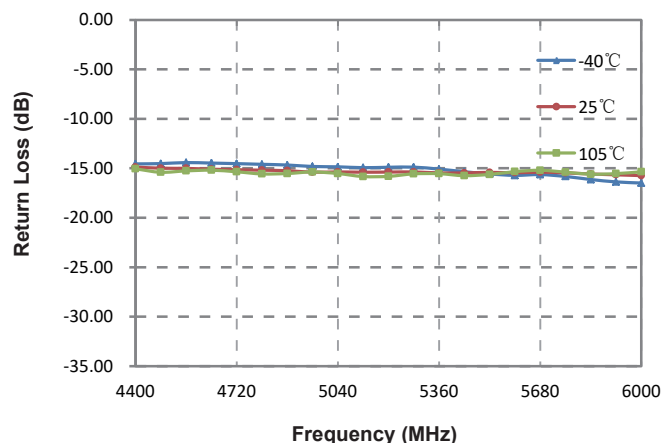
Phase (Degree) VS.Frequency



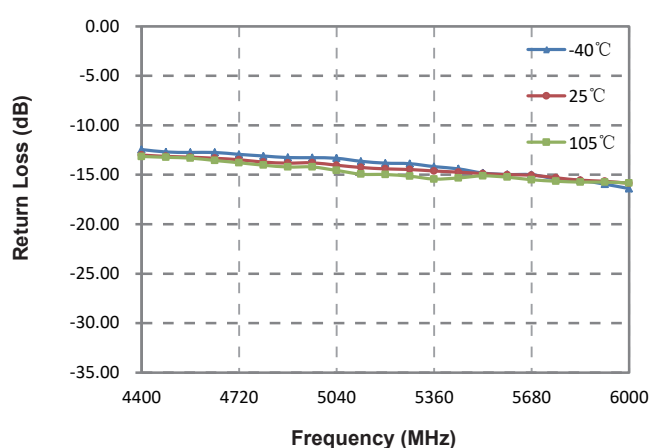
Return Loss (Port 1)



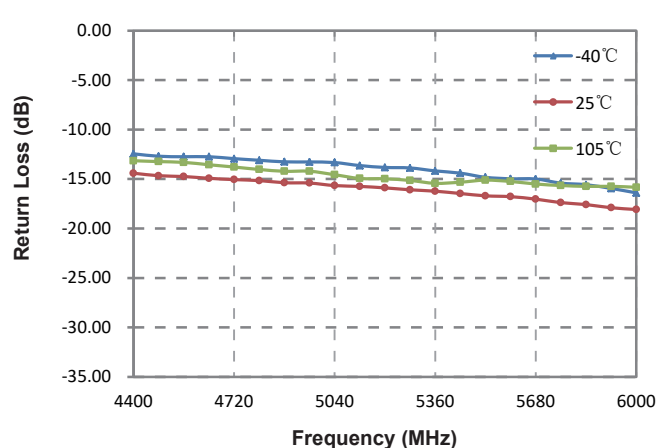
Return Loss (Port 2)



Return Loss (Port 3)



Return Loss (Port 4)



Yantel Corporation

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

Rev A1.0

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

PD5500U05

Preliminary Datasheet

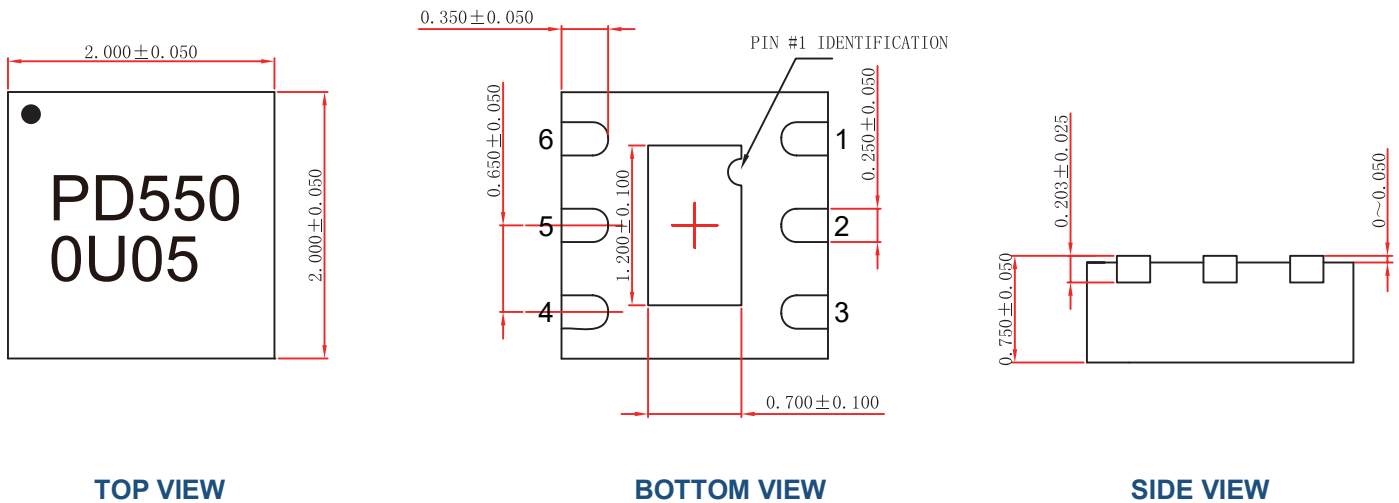
Power Divider/Combiner

3-Way 0° 50Ω 4.4-6GHz

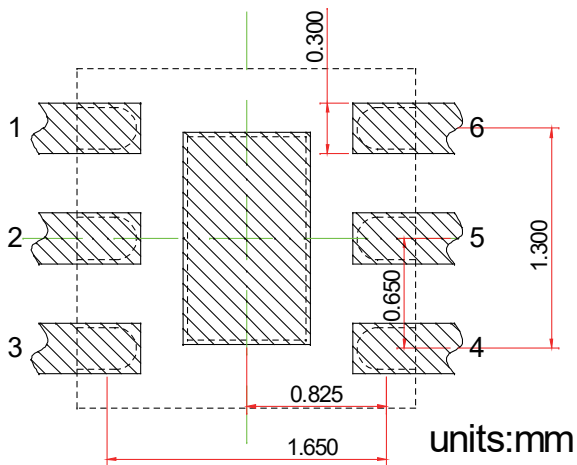


Rev A1.0

Outline Drawing



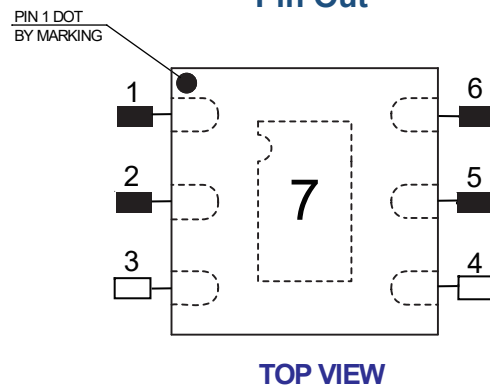
Land Pattern



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

Pin #	Connection
1	OUT1
2	IN/SUM
3	NC
4	NC
5	OUT3
6	OUT2
7	GND

Yantel Corporation

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

Rev A1.0

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com