PD2500U05

Preliminary Datasheet
Power Divider/Combiner
3-Way 0° 50Ω 2.3-2.7GHz

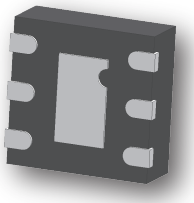
Yantel®
Rev A1.0

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*

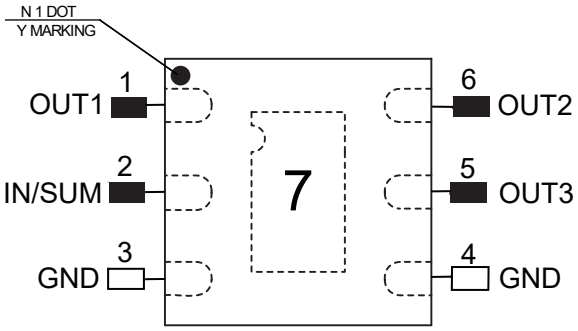
  Operating Temperature -40˚C~105˚C

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



RoHS

REACH COMPLIANT



TOP VIEW

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

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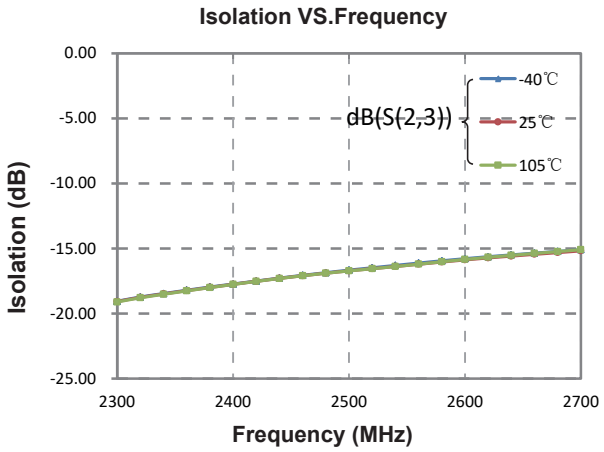
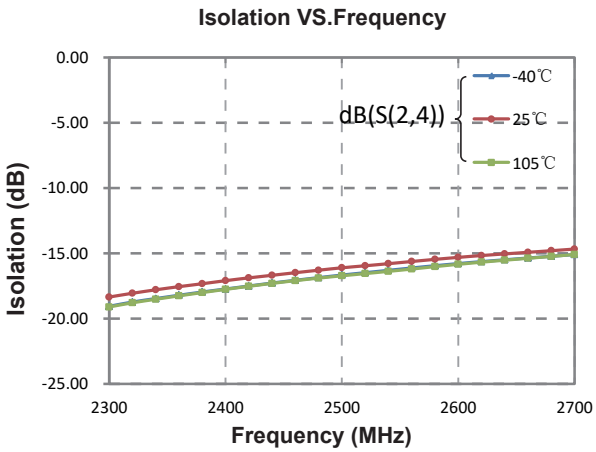
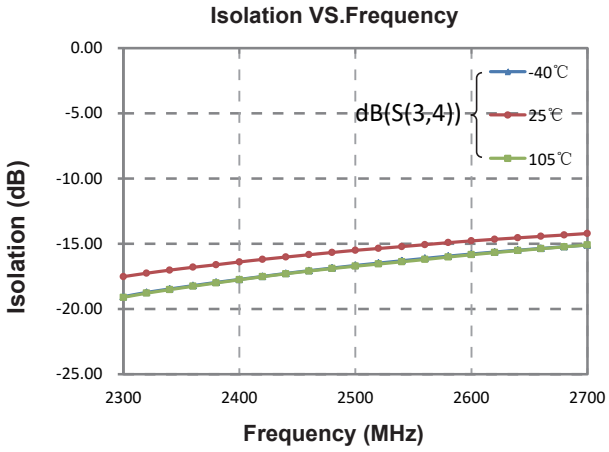
Electrical Specifications at 25º C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	2.3		2.7	GHz
Insertion Loss (Above 5dB)	I_L		0.4	0.6	dB
Isolation	Isol	14.5	20		dB
Phase balance	$ø_{bal}$		3.5	7.0	deg
Amplitude balance	A_{bal}		±0.20	±0.40	dB
Input VSWR			1.30	1.65	
Output VSWR			1.30	1.45	

Typical Performance (-40°C,25°C,105°C: 2.3-2.7GHz)







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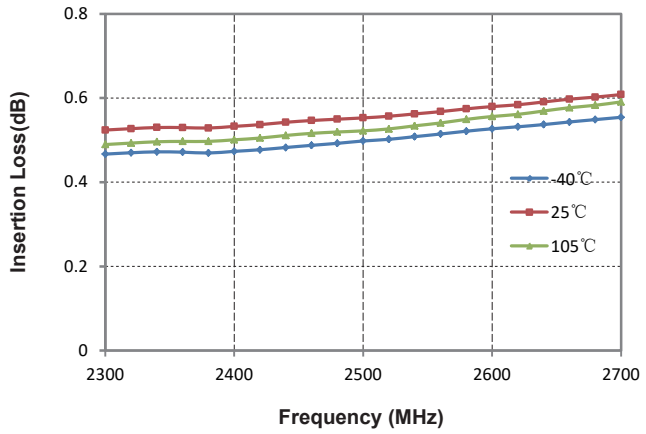
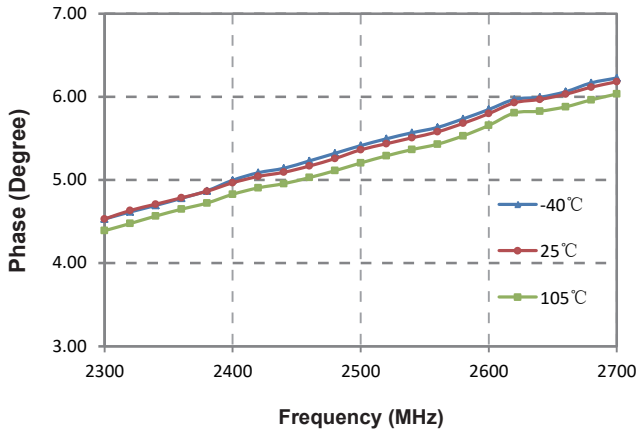
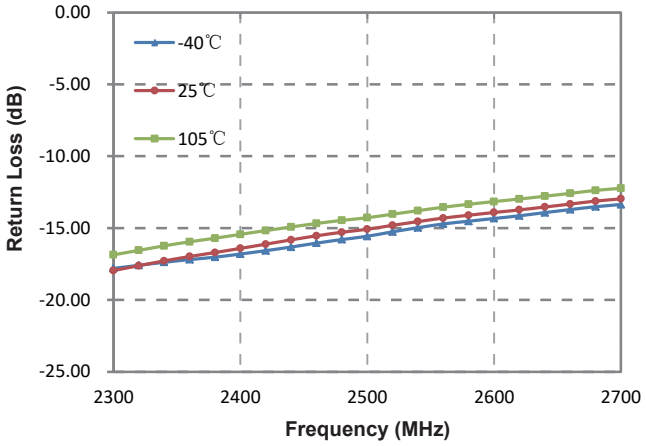
Insertion Loss(dB) VS.Frequency



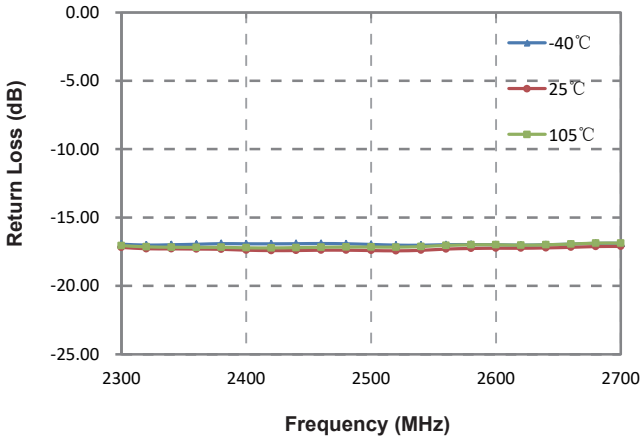
Phase (Degree) VS.Frequency



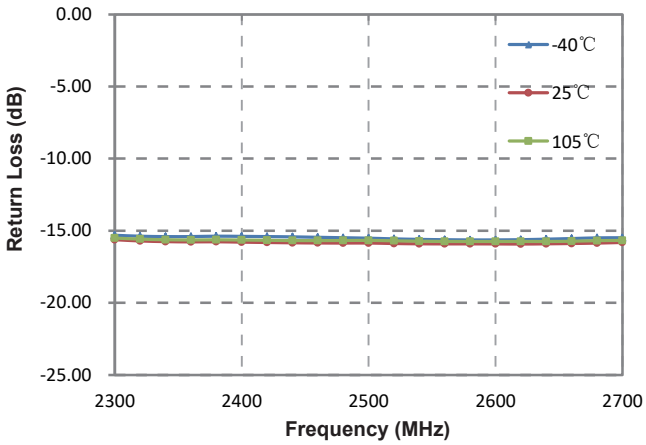
Return Loss (Port 1)



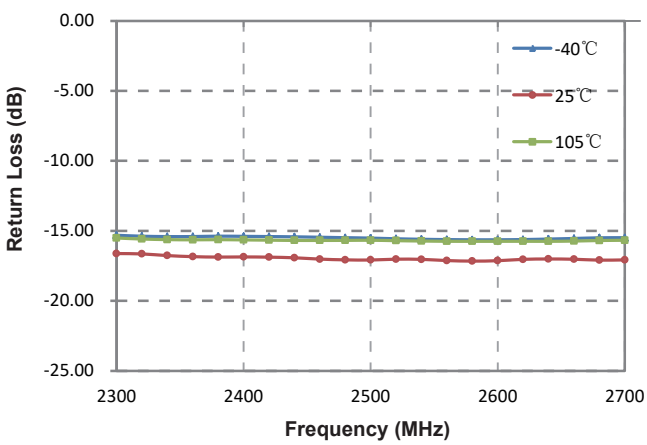
Return Loss (Port 2)



Return Loss (Port 3)



Return Loss (Port 4)



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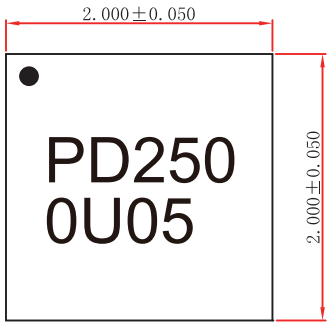
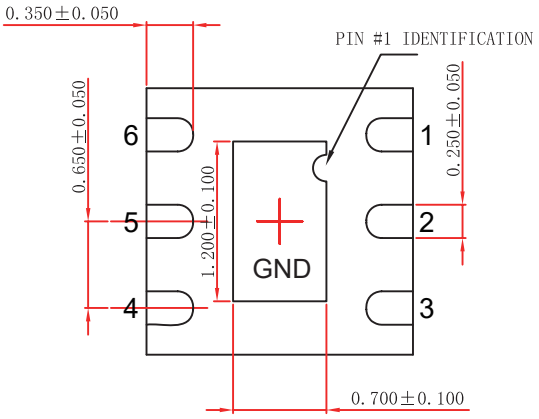
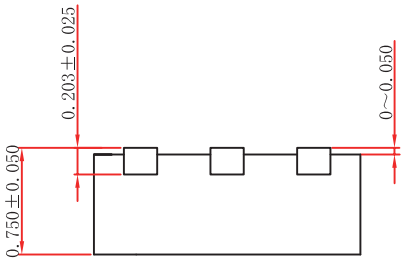
Outline Drawing



TOP VIEW

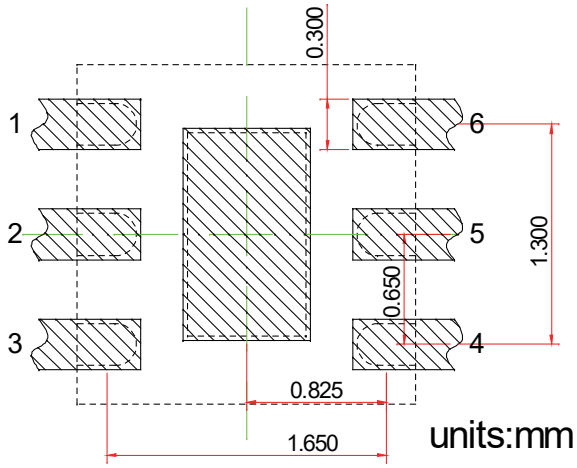


BOTTOM VIEW



SIDE VIEW

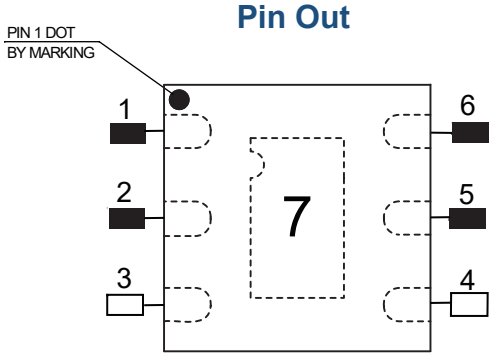
Land Pattern



Recommended Land Pattern
Top View

Notes: All dimensions show in millimeters

Pin Out



TOP VIEW

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

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