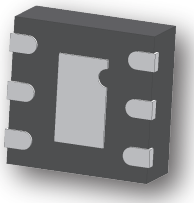
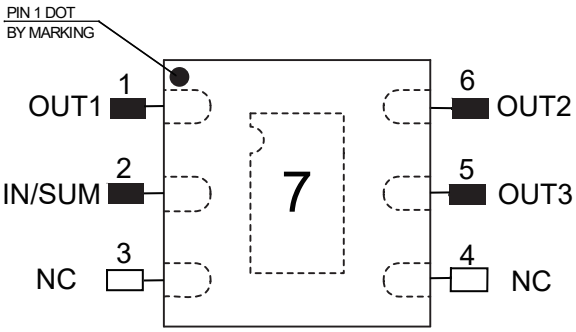
PD3500U05

Preliminary Datasheet
Power Divider/Combiner
3-Way 0° 50Ω 3.2-3.7GHz

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





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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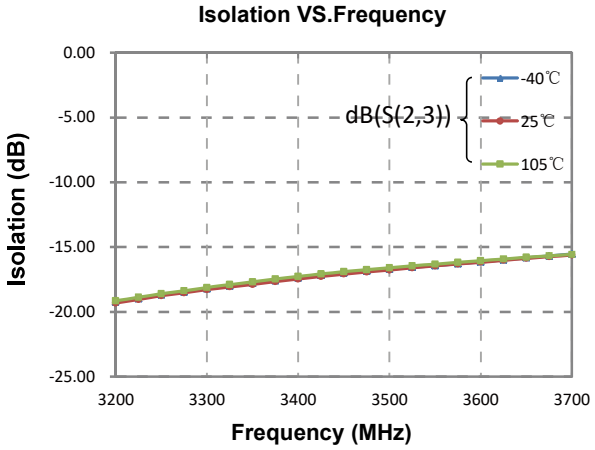
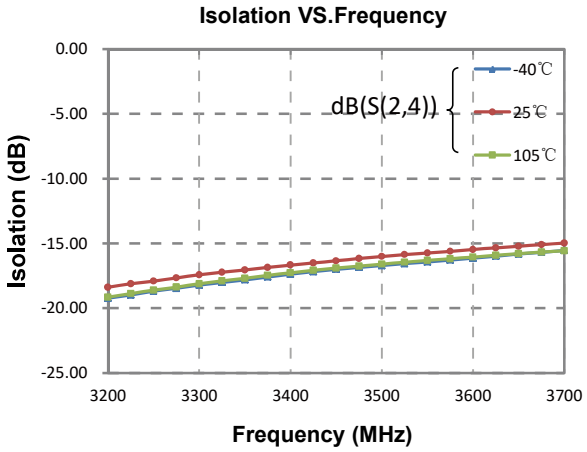
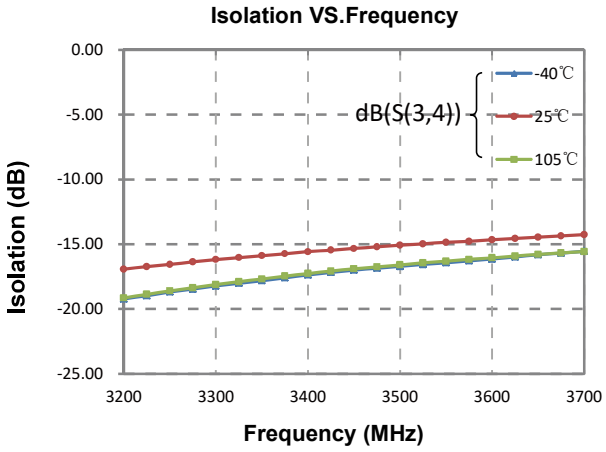
Electrical Specifications at 25º C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	3.2		3.7	GHz
Insertion Loss (Above 5dB)	I_L		0.5	0.7	dB
Isolation	Isol	15.5	25		dB
Phase balance	$ø_{bal}$		3.0	10.0	deg
Amplitude balance	A_{bal}		±0.25	±0.45	dB
Input VSWR			1.30	1.60	
Output VSWR			1.30	1.60	

Typical Performance (-40°C,25°C,105°C: 3.2-3.7GHz)







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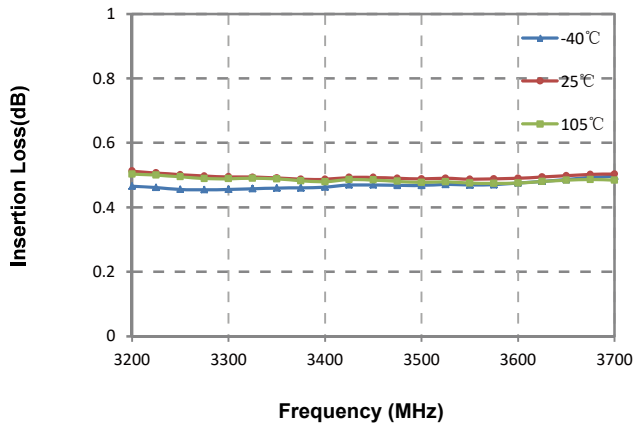
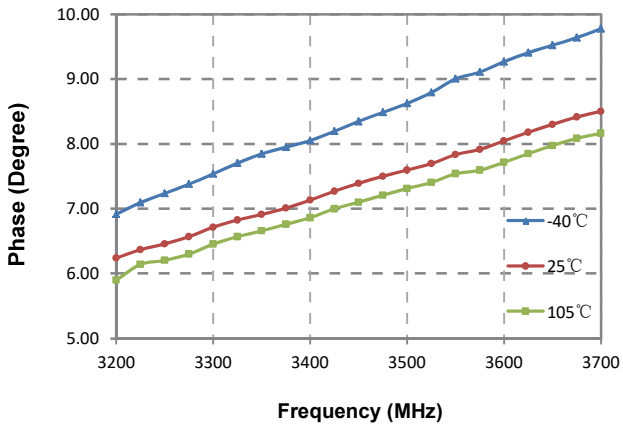
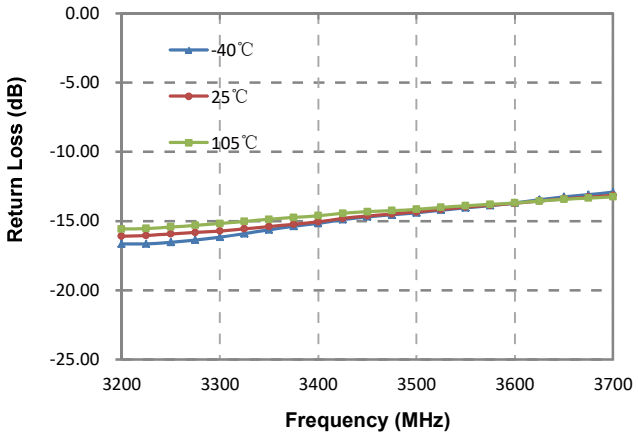
Insertion Loss(dB) VS.Frequency



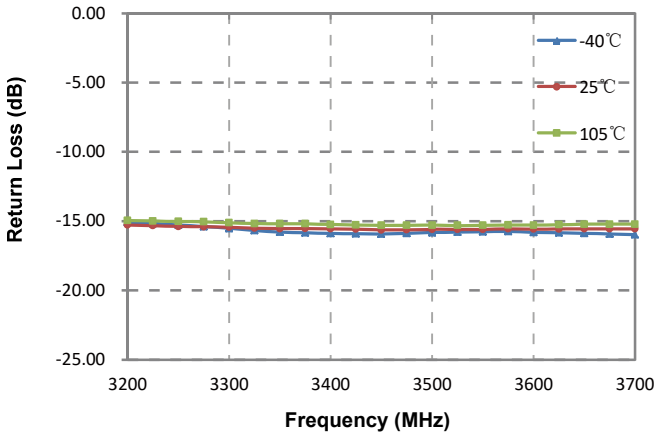
Phase (Degree) VS.Frequency



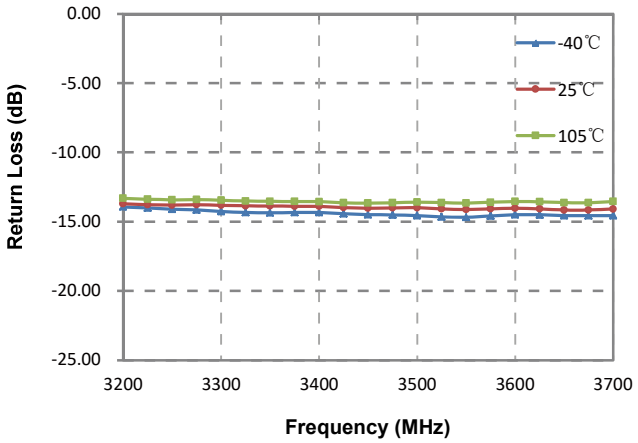
Return Loss (Port 1)



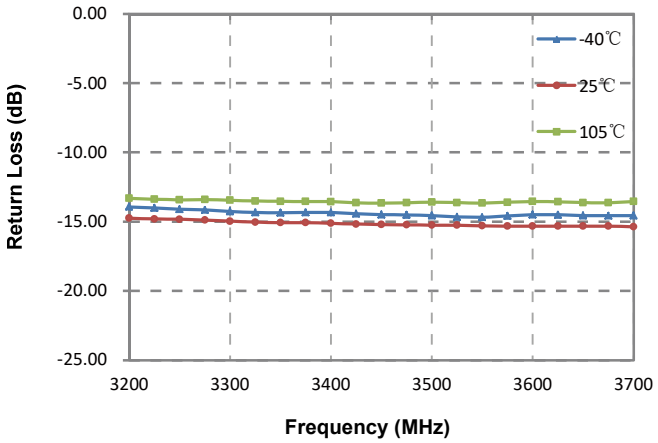
Return Loss (Port 2)



Return Loss (Port 3)



Return Loss (Port 4)



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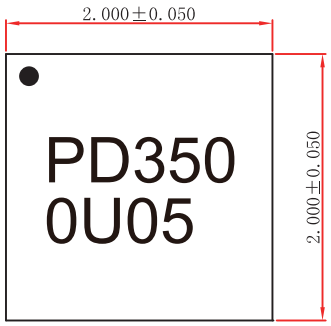
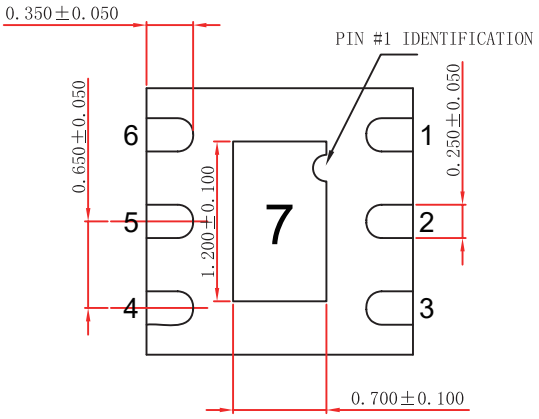
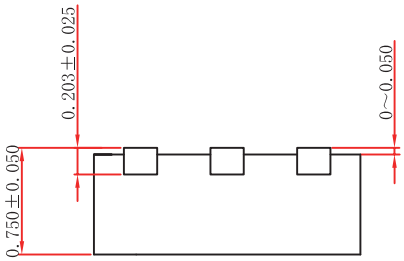
Outline Drawing



TOP VIEW

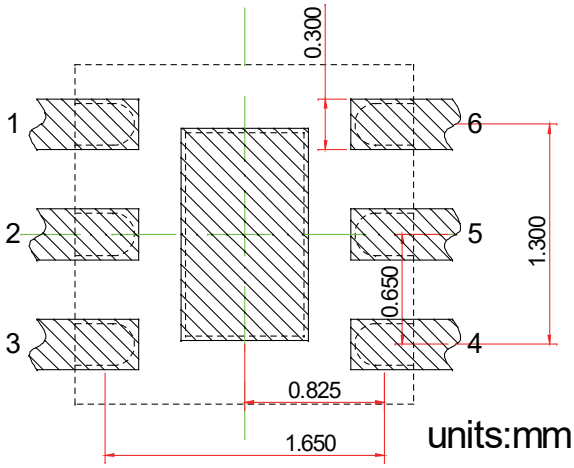


BOTTOM VIEW



SIDE VIEW

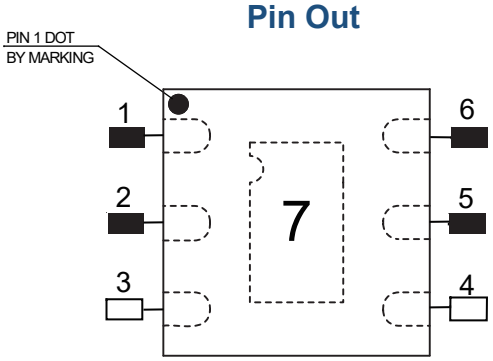
Land Pattern



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	NC
4	NC
5	OUT3
6	OUT2
7	GND