Preliminary Datasheet

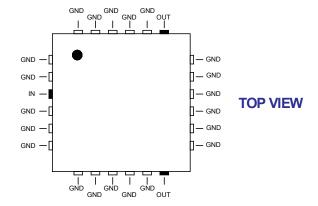
Power Divider/Combiner

2-Way 0° 50 Ω 1.8-12.5 GHz

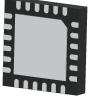
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Features

- Small Size (4×4mm QFN package)
- No need external 100 Ω resistor
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- High ESD level*
- Operating Temperature -50°C~85°C
 Power handling
 - 1.85 Watts as a divider
 - 0.93 Watts as a combiner











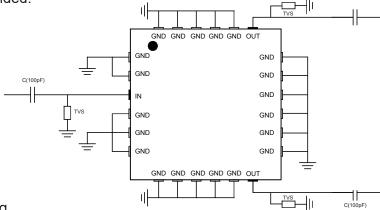
Applications

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

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): \leq 800V in accordance with ANSI/ESD STM 5.1 - 2001 Machine Model (MM): \leq 100V in accordance with ANSI/ESD STM 5.2 - 1999

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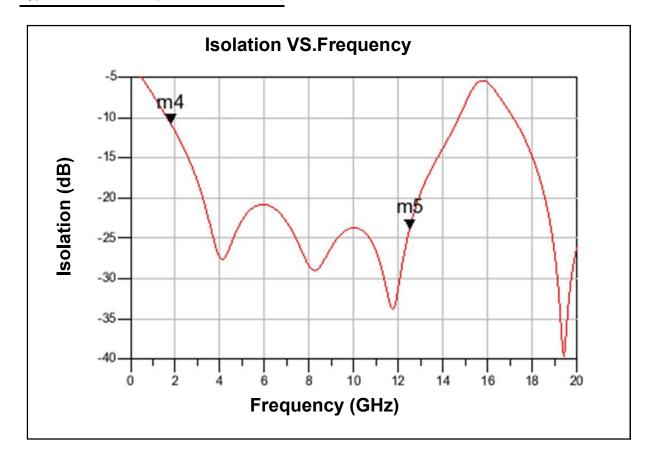
Preliminary Datasheet Power Divider/Combiner 2-Way 0° 50Ω 1.8-12.5 GHz



Electrical Specifications at 25° C

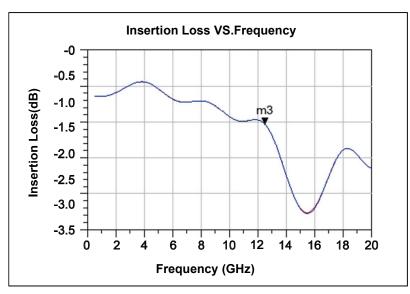
Parameter	Symbol	Min	Тур	Max	Unit
Frequency Range	F	1.8		12.5	GHz
Insertion Loss (Above 3dB)	IL		1.0	2.0	dB
Isolation	Isol	10	20		dB
Phase balance	ø _{bal}		3	5	deg
Amplitude balance	A _{bal}		±0.2	±0.4	dB
Input VSWR			1.45		
Output VSWR			1.45		

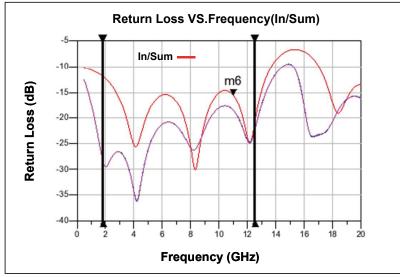
Typical Performance (25°C: 1.8-12.5 GHz)

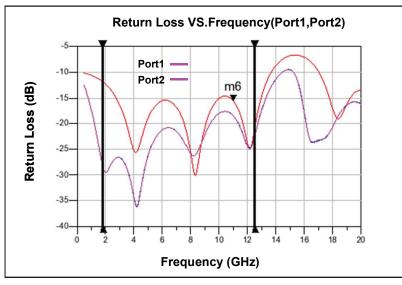


Preliminary Datasheet Power Divider/Combiner 2-Way 0° 50Ω 1.8-12.5 GHz









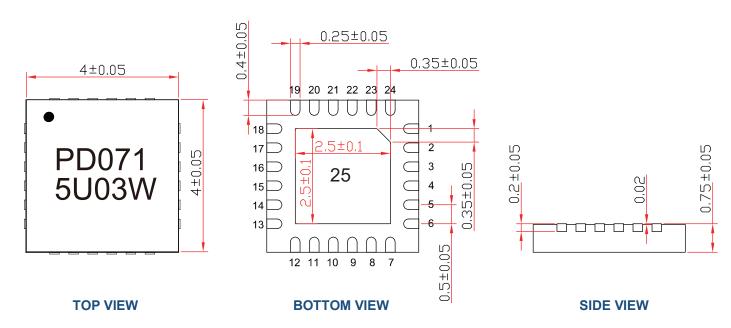
Preliminary Datasheet

Power Divider/Combiner

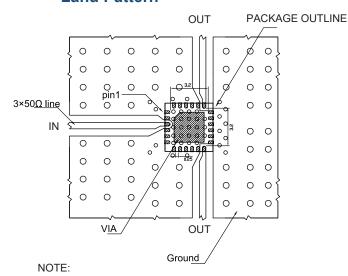
2-Way 0° 50Ω 1.8-12.5 GHz



Outline Drawing units:mm

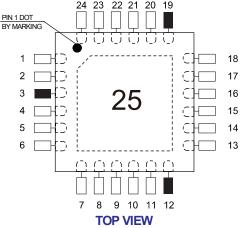


Land Pattern



- 1. 50Ω line width is shown above designing from RO4350B dieletric thickness 0.254mm; copper 1/2 OZ
- 2. Bottom side of the PCB is continuous ground plane.
- 3. All dimensions shown in mm.





Notes:

- 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	GND
2	GND
3	IN
4	GND
5	GND
6	GND
7	GND
8	GND
9	GND
10	GND
11	GND
12	OUT

Pin #	Connection	
13	GND	
14	GND	
15	GND	
16	GND	
17	GND	
18	GND	
19	OUT	
20,	GND	
21	GND	
22	GND	
23	GND	
24	GND	
25	GND	

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