

Data Sheet

PD0500U03-210

Power Divider/Combiner

2-Way 0° 50Ω 280-610 MHz



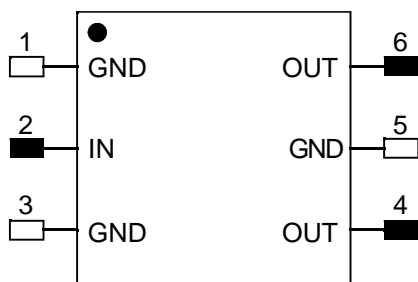
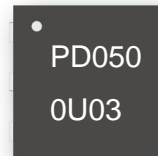
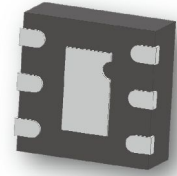
Features

- Small Size (2x2mm DFN 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 -40°C~85°C

Power handling

- 2 Watts as a divider
- 1 Watts as a combiner



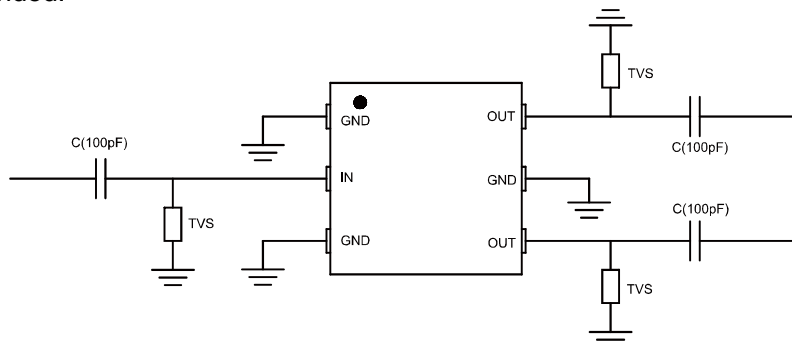
TOP VIEW

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): ≤ 800V in accordance with ANSI/ESD STM 5.1 - 2001

Machine Model (MM): ≤ 100V in accordance with ANSI/ESD STM 5.2 - 1999

Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China

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

Rev A4

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

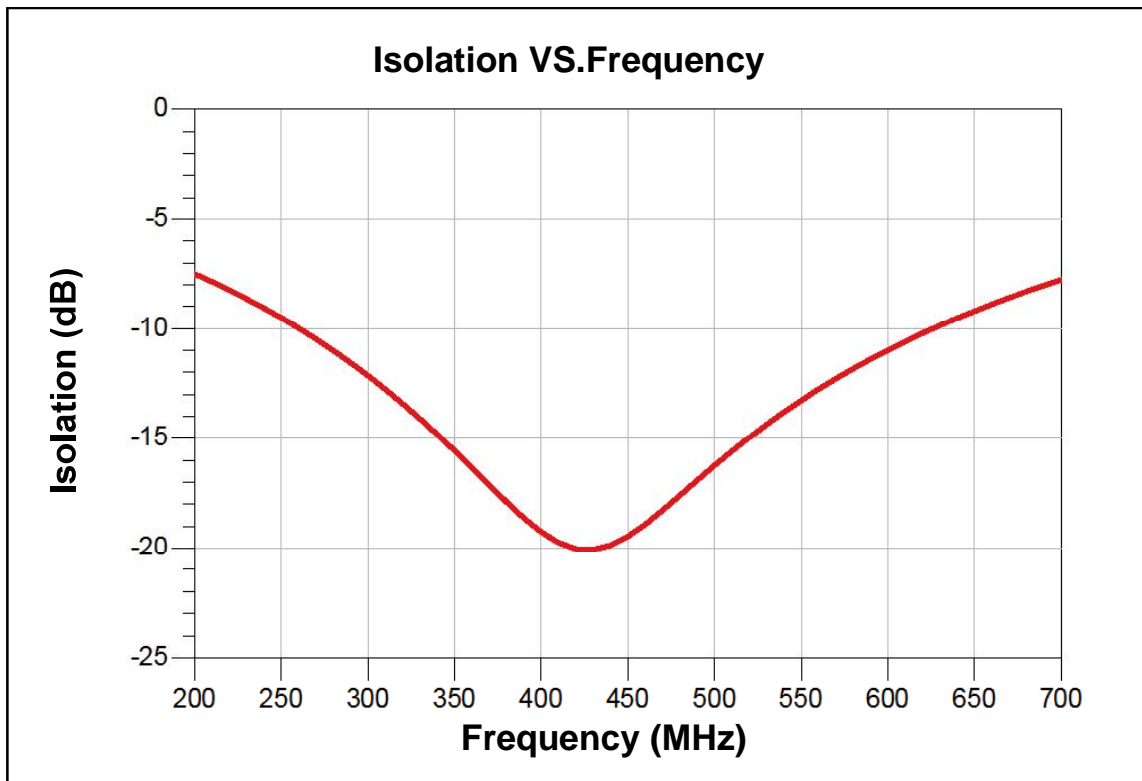
Data Sheet
PD0500U03-210
Power Divider/Combiner
2-Way 0° 50Ω 280-610 MHz



Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	280		610	MHz
Insertion Loss (Above 3dB)	I _L		0.6		dB
Isolation	Isol		10		dB
Phase balance	∅ _{bal}		±0.5		deg
Amplitude balance	A _{bal}		±0.1		dB
Input VSWR			1.4	1.6	
Output VSWR			1.2	1.3	

Typical Performance (-40°C, 25°C, 85°C, 125°C: 280-610 MHz)



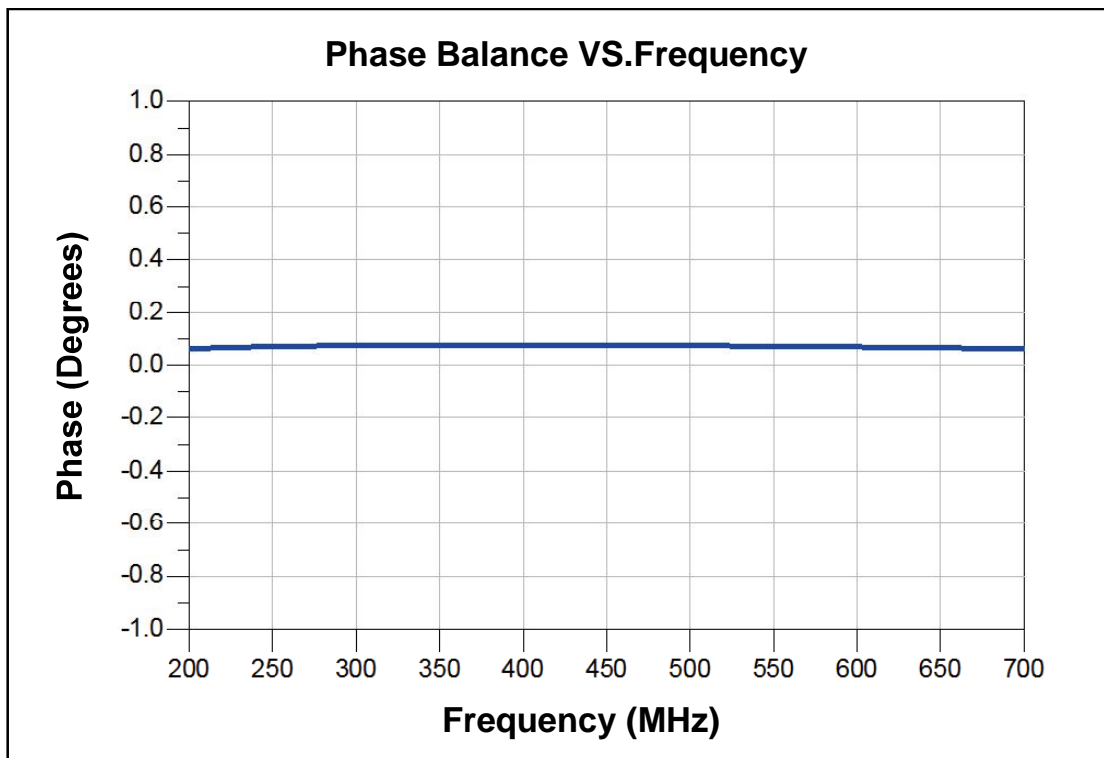
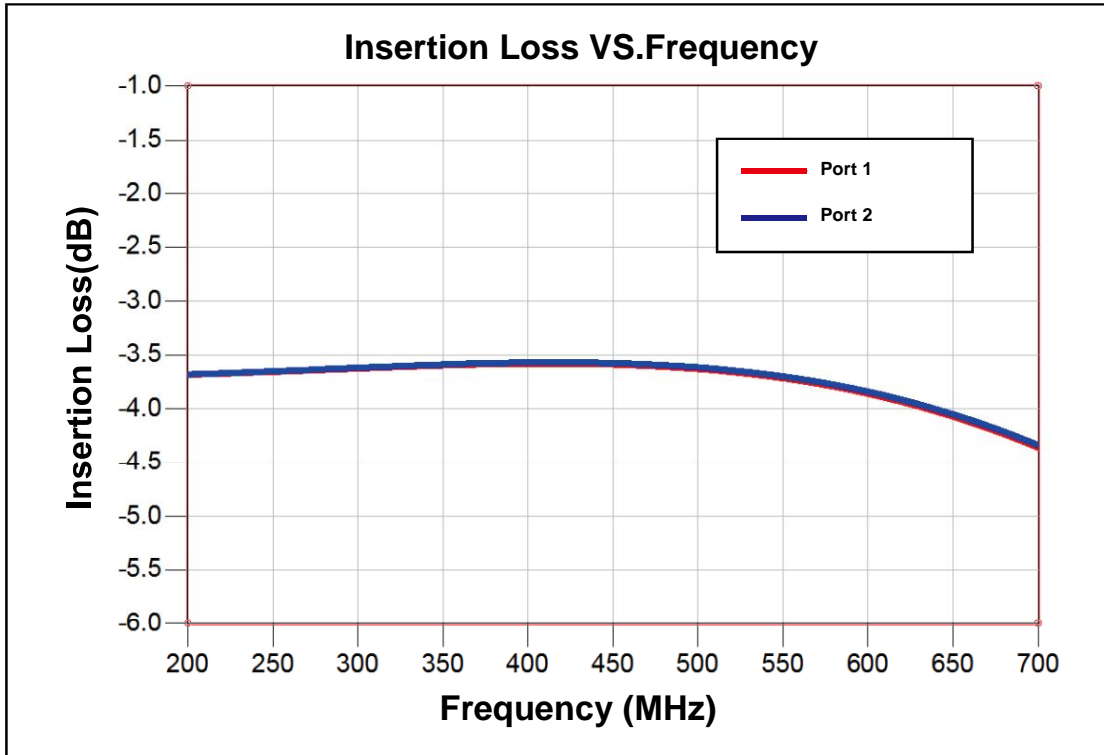
Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China
 Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A4

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

Data Sheet
PD0500U03-210
Power Divider/Combiner
2-Way 0° 50Ω 280-610 MHz



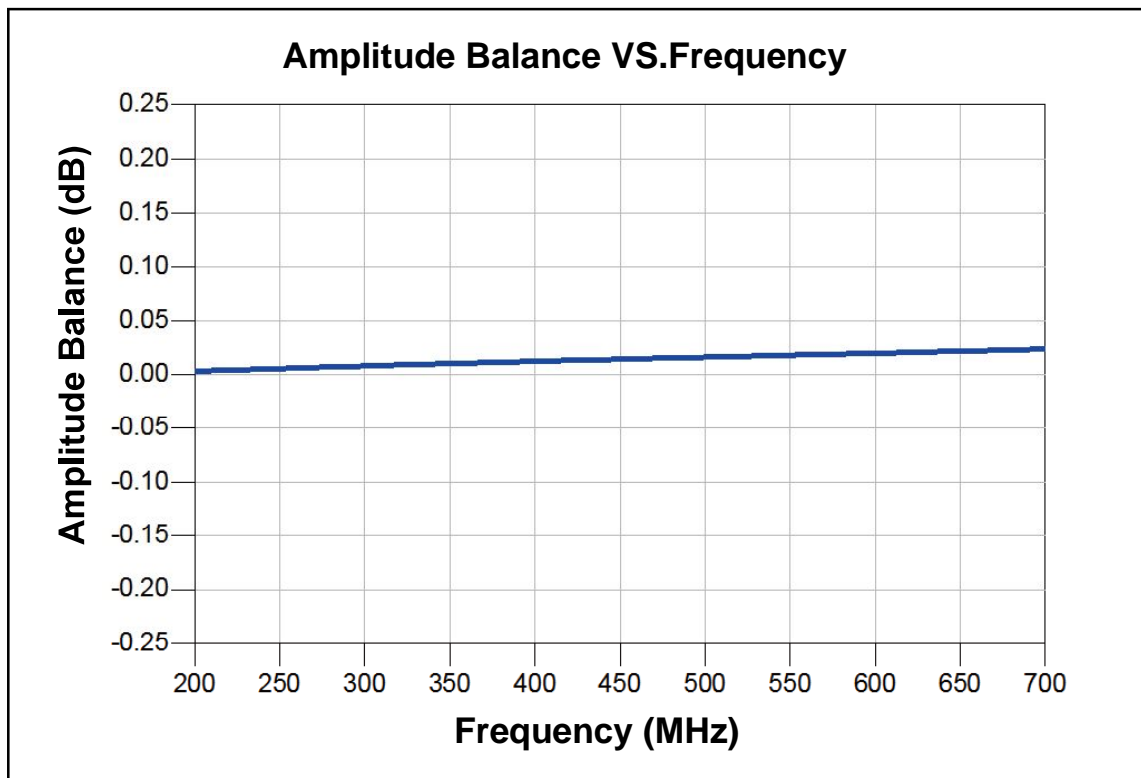
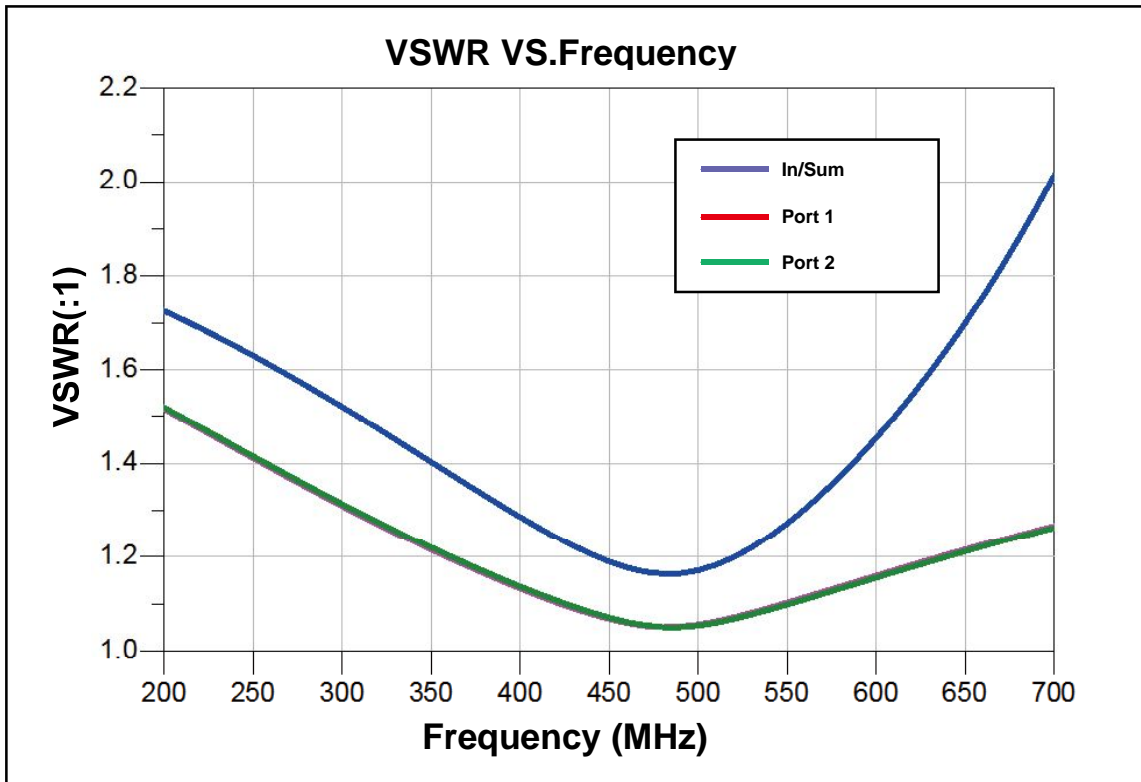
Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A4

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

Data Sheet
PD0500U03-210
Power Divider/Combiner
2-Way 0° 50Ω 280-610 MHz



Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A4

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

Data Sheet

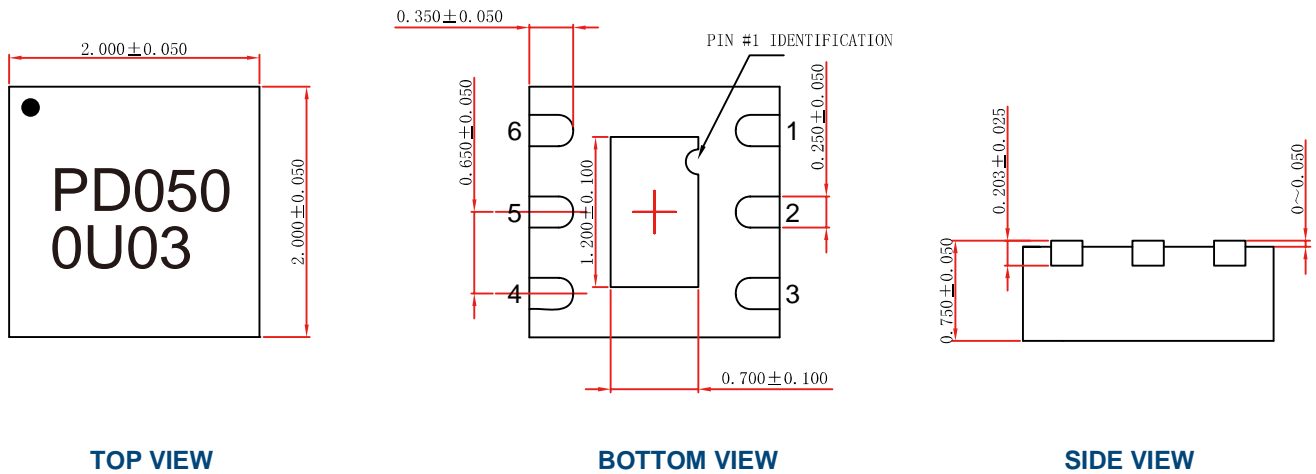
PD0500U03-210

Power Divider/Combiner

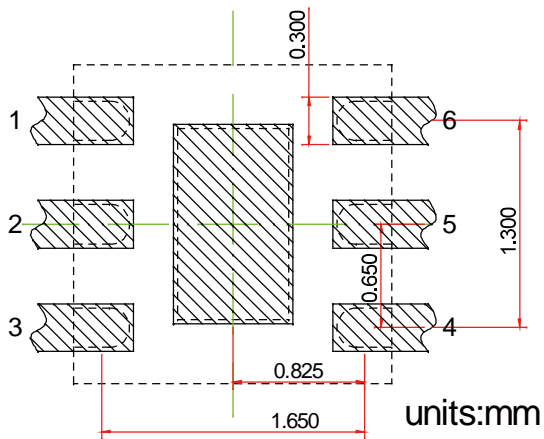
2-Way 0° 50Ω 280-610 MHz



Outline Drawing



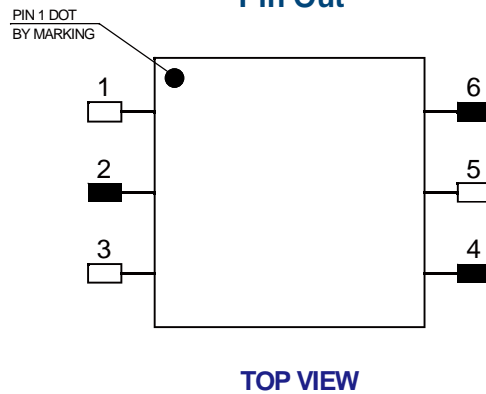
Land Pattern



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	GND
2	IN
3	GND
4	OUT
5	GND
6	OUT

Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A4

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