



# Ultra Low Profile 0603 Power Divider $50\Omega$ to $50\Omega$

#### **Description**

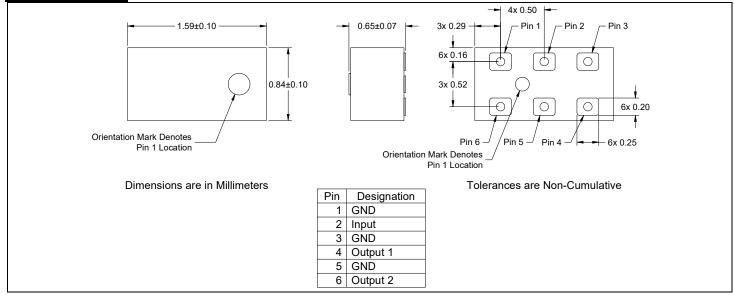
The PD2635L5050S2HF is a low profile, sub-miniature Wilkinson power divider in an easy to use surface mount package. The PD2635L5050S2HF is ideal for high volume manufacturing and delivers higher performances than traditional printed and lumped element solutions. The PD2635L5050S2HF is matched to 50  $\Omega$  and has a height profile of 65mm, which is ideal for high-level integrations in the following markets: 5G, LTE. The PD2635L5050S2HF does not include the resistive element and therefore, requires an external resistor for operation. The PD2635L5050S2HF is available on tape and reel for high volume manufacturing pick and place.

#### **Detailed Electrical Specifications:** Specifications subject to change without notice.

Features:			ROOM (25°C)												
•	2490-4000 MHz	Parameter	Min	тур	Max	Min	Тур	Max	Min	тур	Max	Min	Тур	Max	Unit
•	65mm Height Profile	Frequency	2496		2600	2600		3500	3400		3800	3800		4000	MHz
•	50Ω Input /	Input Port Impedance		50			50			50			50		Ω
50	Ω Outputs	Output Port Impedance		50			50			50			50		Ω
•	Low Insertion Loss	Return Loss	13	16		14	17		14	17		12	17		dB
•	Surface Mountable	Insertion Loss*		0.4	0.5		0.3	0.5		0.4	0.6		0.4	0.7	dB
•	Tape & Reel	Amplitude Balance		0	0.3		0	0.3		0	0.3		0	0.4	dB
•	Non-conductive Surface	Phase Balance		0.2	3		0.2	3		0.2	4		0.2	4	Degree s
•	RoHS Compliant	Isolation (Output Ports)	16	18		15	20		15	20		14	20		dB
•	External Resistor Required	Power Handling @85C			2			2			2			2	Watts
•	Halogen Free	Operating Temperature	-55		105	-55		105	-55		105	-55		105	°C

\* Insertion Loss stated at room temperature (Insertion Loss is approximately 0.1 dB higher at +85 °C)

#### **Outline Drawing**





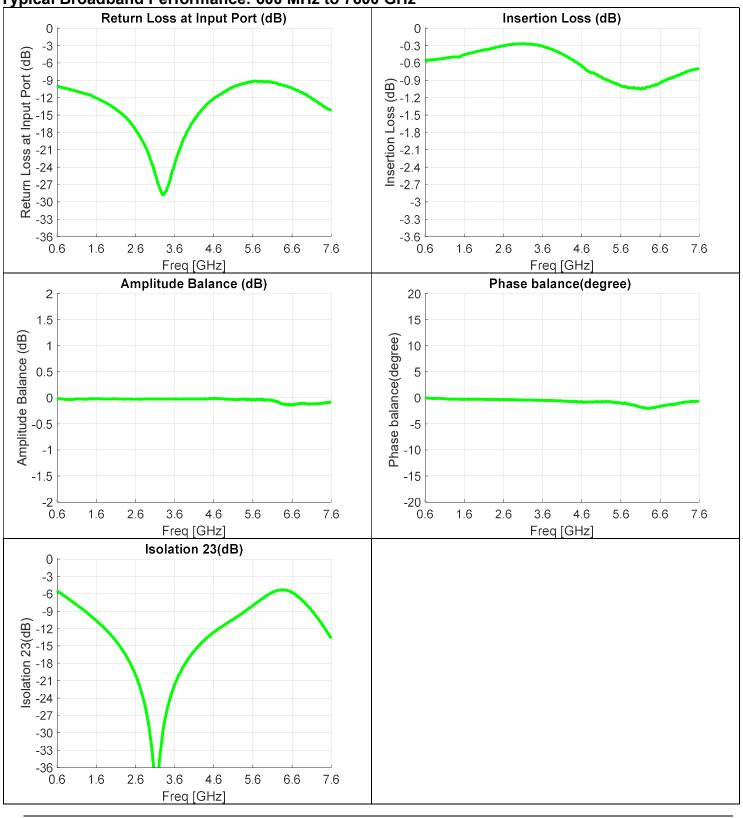


Available on Tape and Reel for Pick and Place Manufacturing. USA/Canada: (: Toll Free: (: Europe: +4

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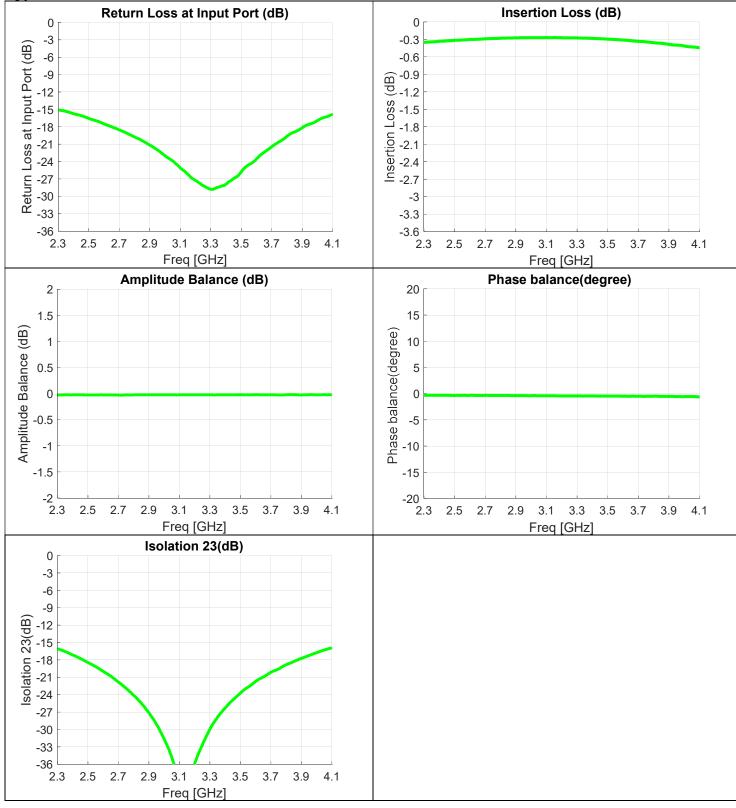
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# Model PD2635L5050S2HF

#### Typical Performance:2300 MHz to 4100 MHz







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#### Mounting Configuration:

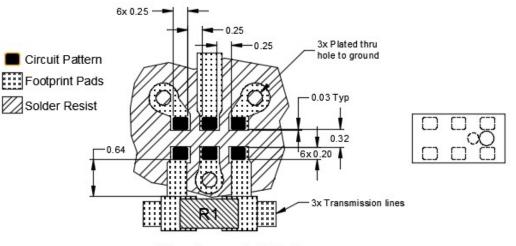
In order for Xinger surface mount components to work optimally, the proper impedance transmission lines must be used to connect to the RF ports. If this condition is not satisfied, insertion loss, Isolation and VSWR may not meet published specifications.

An example of the PCB footprint used in the testing of these parts is shown below. In specific designs, the transmission line widths need to be adjusted to the unique dielectric coefficients and thicknesses as well as varying pick and place equipment tolerances. In addition, since the PD2635L050S2HF is a Wilkinson power divider, an external 0603 100 $\Omega$  resistor must be mounted in locations R1 as shown in the Figure below.

All of the Xinger components are constructed from organic PTFE based composites which possess excellent electrical and mechanical stability. Xinger components are compliant to a variety of ROHS and Green standards and ready for Pb-free soldering processes. Pads are Gold plated with a Nickel barrier.

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#### Pad Footprint w/ 0402 Resistor Location



Dimensions are in Millimeters Mounting Footprint

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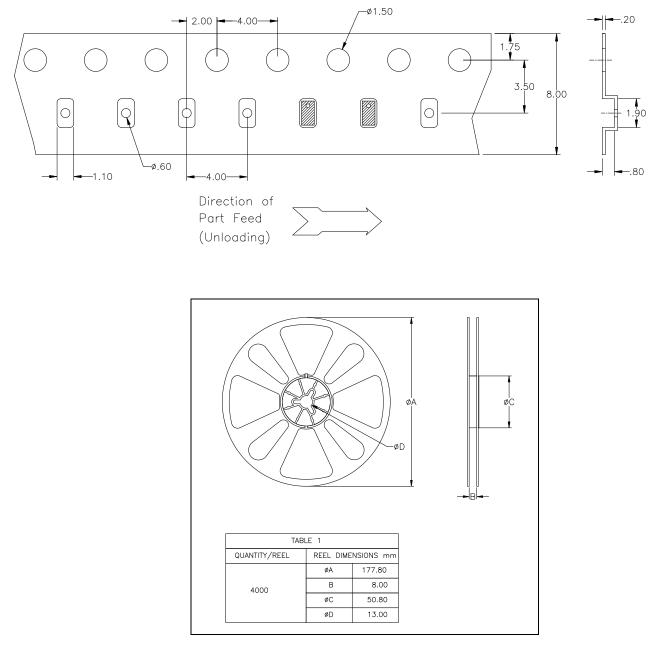
Available on Tape and Reel for Pick and Place Manufacturing.





### Packaging and Ordering Information

Parts are available in reel and are packaged per EIA 481-D. Parts are oriented in tape and reel as shown below. Minimum order quantities are 4000 per reel.







Available on Tape and Reel for Pick and Place Manufacturing. USA/Canada: Toll Free: Europe:

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## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Anaren: PD2635L5050S2HF