

2 - 18 GHz 2-way Wilkinson Power Divider PDW06933

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DESCRIPTION

DLI's 2 - 18 GHz 2-way power divider / combiner offers unmatched size and performance in a wirebond configuration. This power divider utilizes DLI's low loss temperature stable materials which offer small size and minimal performance variation over temperature.

FEATURES

- Small Size
- Frequency Stable over Temperature
- Epoxy Mount Wirebond Package
- Excellent Repeatability
- Moisture Sensitivity Level: MSL1
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

Packaging and Ordering Information:

To request tape and reel packaging, please order part number PDW06933-T, see page 5.



SPECIFICATIONS*

Parameter	Min	Typ.	Max
Operating Frequency Range (GHz)	2 - 18		
Nominal Power Splitting (dB)		3.0	
Nominal Phase Shift (Deg)		0.0	
Excess Insertion Loss (dB)			2.5
Return Loss (dB)	14	18	
Amplitude Balance (dB)			± 0.25
Phase Balance (Deg)			± 5.0
Isolation (dB)		20	
Max CW Input Power** as Divider (W)			10
Max CW Input Power** as Combiner (W)			5***
Size (L x W x H)	0.600 x 0.180 x 0.020 in 15.24 x 4.57 x 0.51 mm		

*Electrical specifications based on typical mounted performance at room temperature. Insertion loss shall vary ±0.5dB over temperature.

**Power rating assumes the component will be mounted to a PCB with good thermally conducting ground vias as outlined in the recommended PCB layout that are connected to an adequate heat sink. Max power is based on 85°C base temperature.

***Power rating as a combiner assumes that the incoming signals are of equal amplitude and phase.

Information in this document is for informational and guideline purposes only. All information regarding the Product described in this datasheet is subject to change from time to time at Knowles Precision Devices' sole discretion. It is the customer's sole responsibility to evaluate the suitability of the Product in the customer's particular application. Knowles Precision Devices assumes no responsibility or liability for the use of the information contained within.

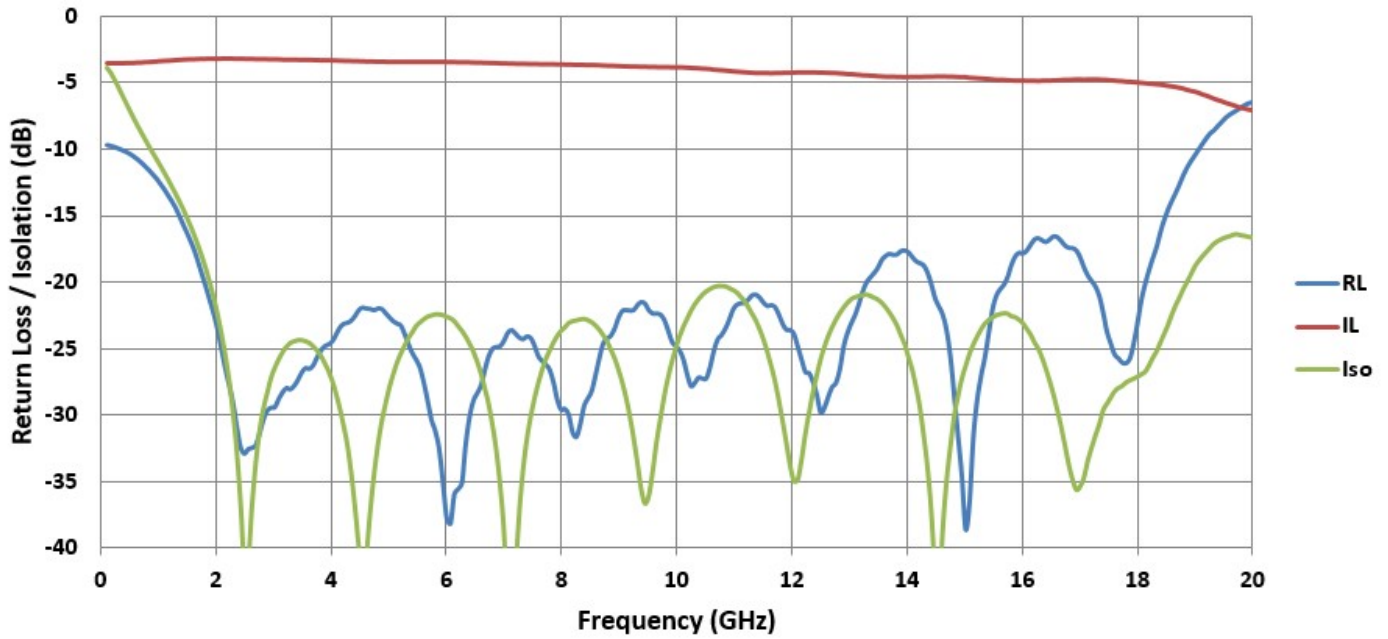
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Typical Measured Performance



*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.010 in. RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

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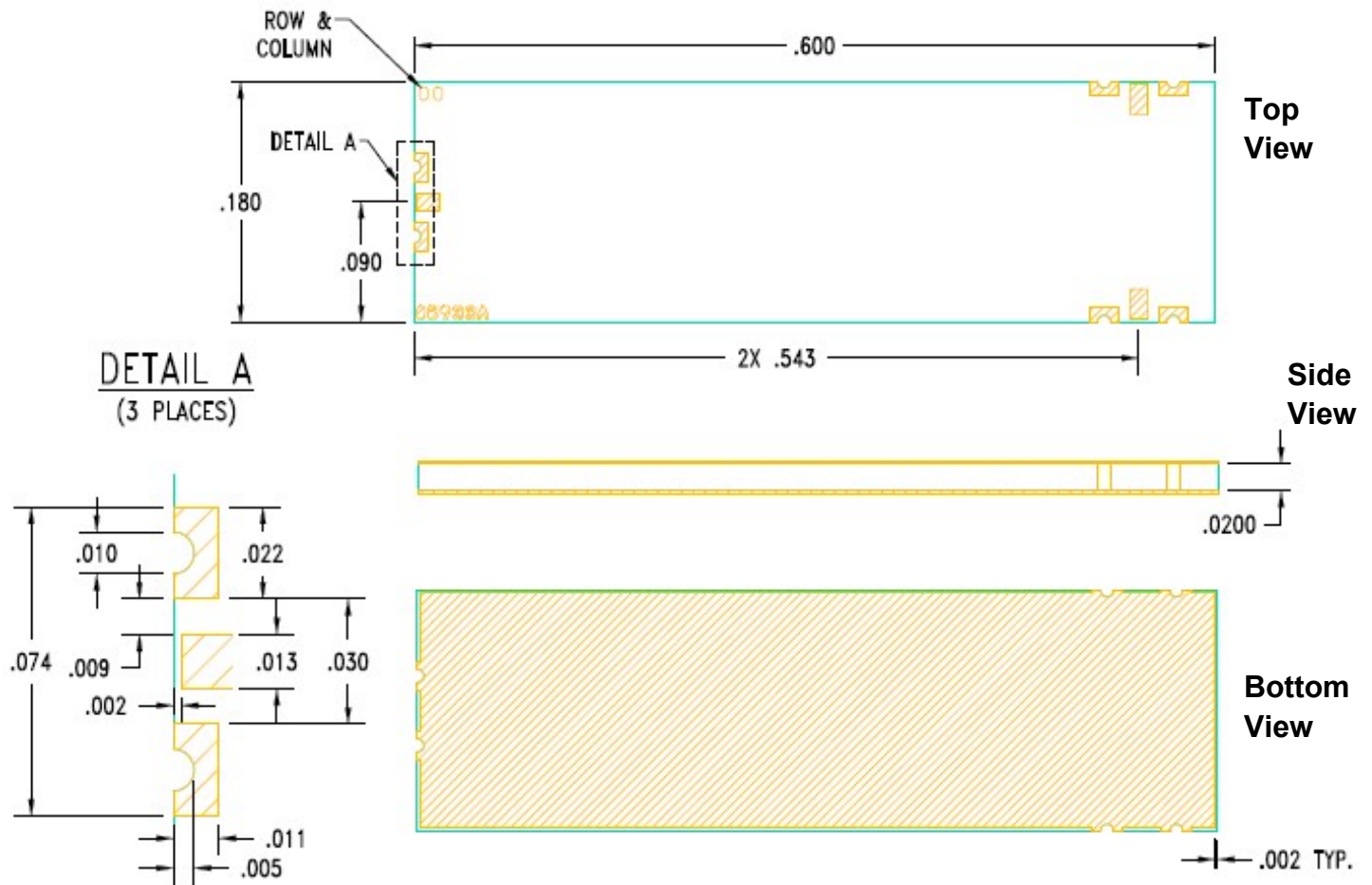
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Physical Dimensions

Units = Inches



Notes :

1. Termination Finish: Gold
2. Maximum Assembly Process Temperature: 250°C

Tolerances:

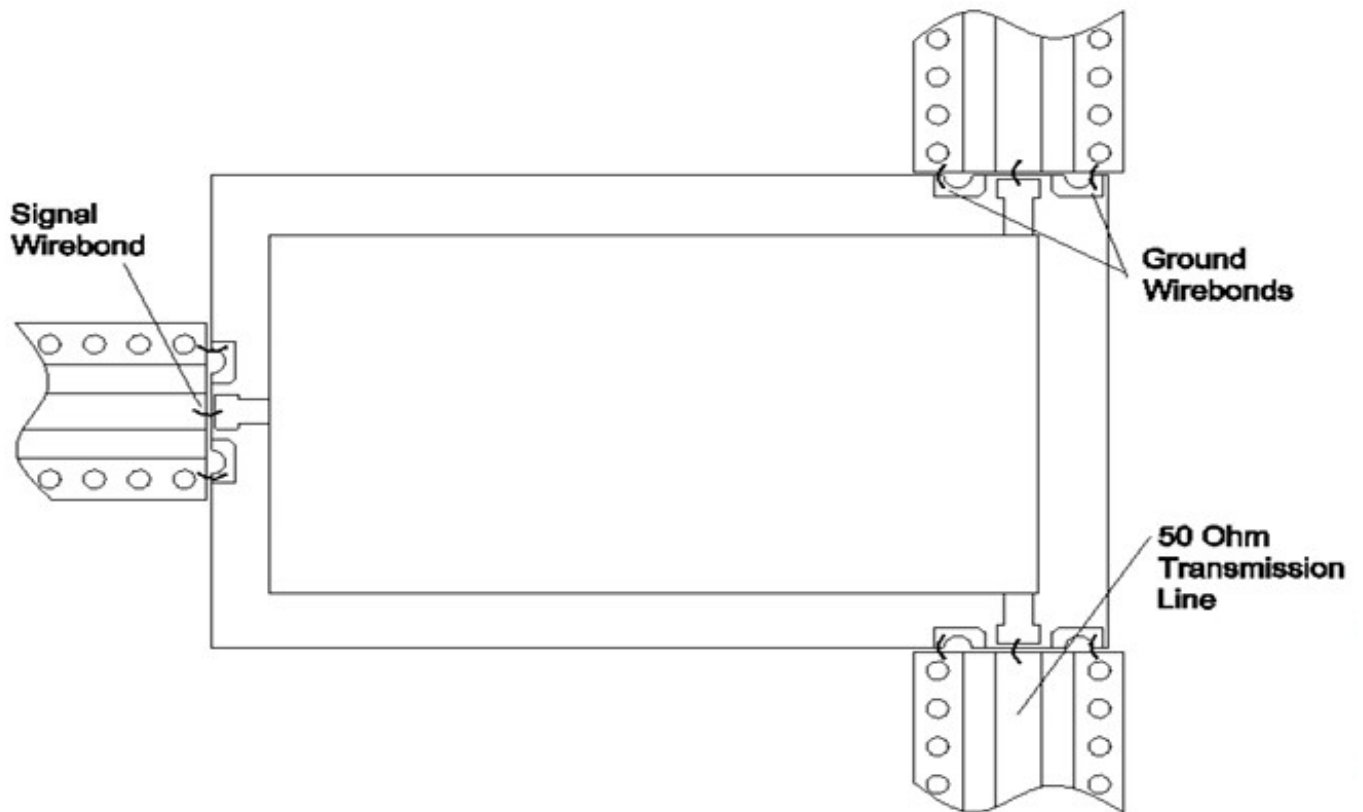
- For values with 3 decimal places ± 0.001
- For values with 4 decimal places ± 0.0005

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Recommended PCB Layout



*To view the Wire Bond Application
Note scan the QR Code

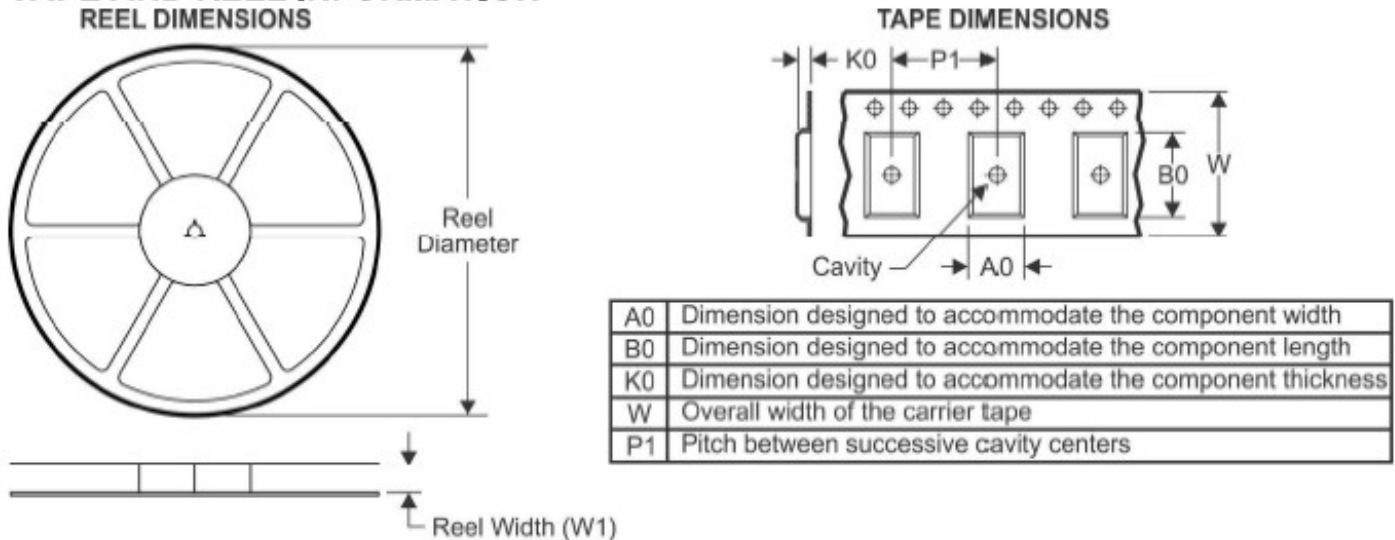
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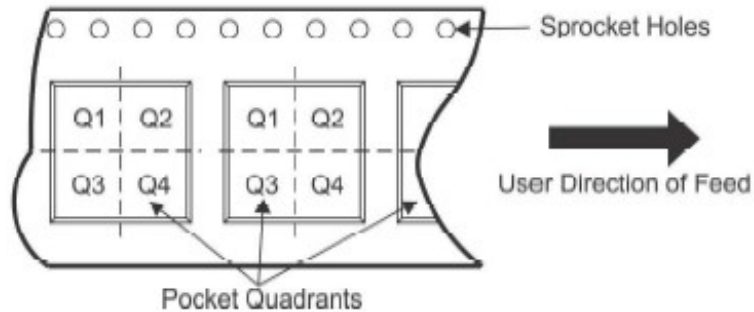
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TAPE AND REEL INFORMATION



QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



*All dimensions are nominal

Device	Package Type	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
PDW06933-T	SMD	180	24.4	4.9	15.6	0.8	8	24	Q1&2

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