YT-FHC10288



6 to 12GHz

Quadrature Hybrid Coupler

DESCRIPTION

Yantel's Quadrature Hybrid Couplers offer unmatched size and wideband performance in a surface mount configuration. These 3 dB couplers offers excellent phase and amplitude balance with low loss and good isolation. As catalog components, they are available in a variety of frequency bands which offers a drop in solution with highly repeatable performance.

FEATURES

- Small Size
- 90° Phase Delta between Output Ports
- >50W Power Handling
- Solder Surface Mount Package
- Frequency Stable over Temperature

Operating & Storage Temp: -55°C to +125°C

Moisture Sensitivity Level: MSL1
Characteristic Impedance: 50Ω

Electrical Specifications

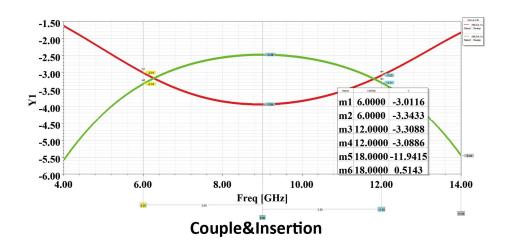
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Parameter	Specification			
Frequency Range	6∼12GHz			
Typical Insertion Loss	1 dB			
Typical Return Loss	16. 5dB			
Isolation	17dB			
Amplitude Balance	0. 3dB			
Characteristic Impedance	50 Ω			
Package Size	0.5 x 0.25 x 0.01 in 12.7 x 6.35 x 0.25 mm			

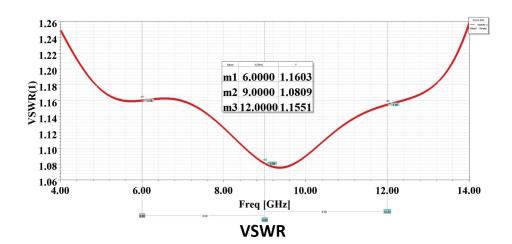
^{*}Electrical specifications based on typical mounted performance at room temperature. Insertion loss may vary $\pm 0.5 dB$ over temperature.

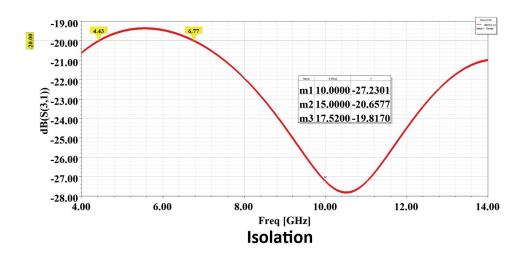
Quadrature Hybrid Coupler Port Configuration Options							
	Port 1	Port 2	Port 3	Port 4			
Configuration 1	lnput	lsolated	Coupled	Output			
Configuration 2	lsolated	lnput	Output	Coupled			
Configuration 3	Coupled	Output	lnput	lsolated			
Configuration 4	Output	Coupled	lsolated	lnput			

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Typical Measured Performance





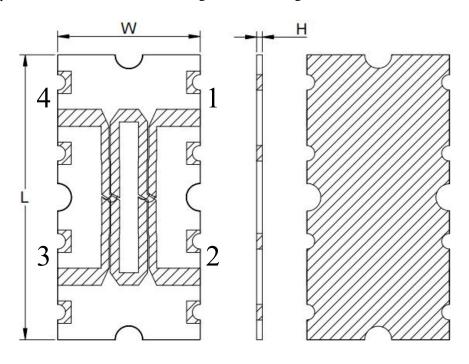


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Physical Dimensions

The product requires customers to make their own gold wire bonding.



TOP	SIDE	BOTTOM

Product Number	Length(in)	Width(in)	Height(in)	Length(mm)	Width(mm)	Height(mm)
YT-FHC10288	0.50	0.25	0.01	12.70	6.35	0.25

Recommended PCB Parameters:

- 0.010 inch Rogers Board RO4350B
- 3.66 dK, Board Material design
- Dimensions of 50.0 Ohm CPWG :

0.016 in. RF trace width 0.007 in. spacing