YT-FHC09096



4 to 8 GHz

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	4∼8GHz				
Typical Insertion Loss	0. 35dB				
Typical Return Loss	20. 0dB				
Isolation	22dB				
Amplitude Balance	0. 4dB				
Characteristic Impedance	50 Ω				
Package Size	0.5 x 0.25 x 0.01 in 12.7 x 6.35 x 0.25 mm				

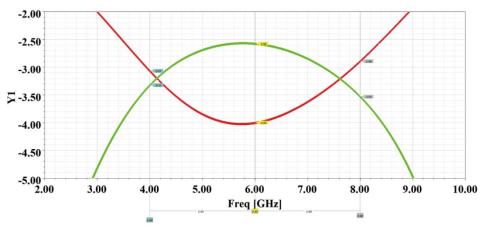
^{*}Electrical specifications based on typical mounted performance at room temperature. Insertion loss may vary $\pm 0.5 dB$ over temperature.

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					

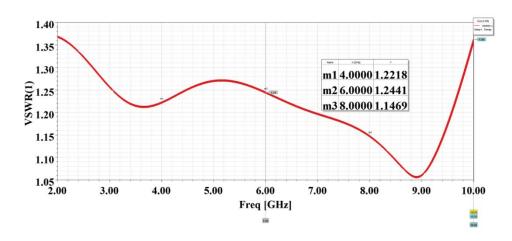
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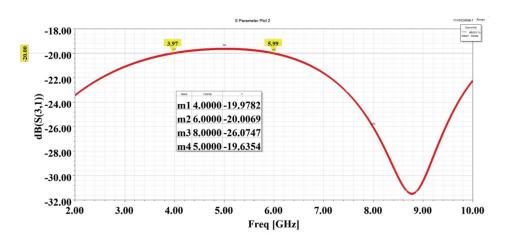
Typical Measured Performance



Couple&Insertion



VSWR



Isolation

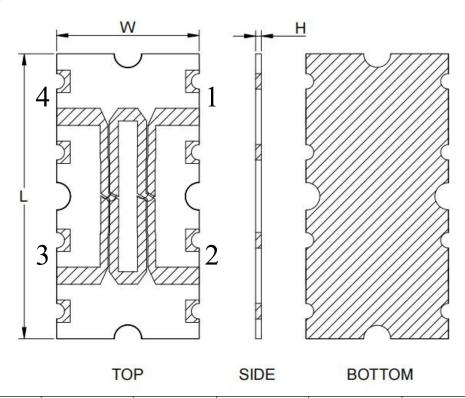
Yantel Corporation

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Physical Dimensions

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



Product Number	Length(in)	Width(in)	Height(in)	Length(mm)	Width(mm)	Height(mm)
YT-FHC09096	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