

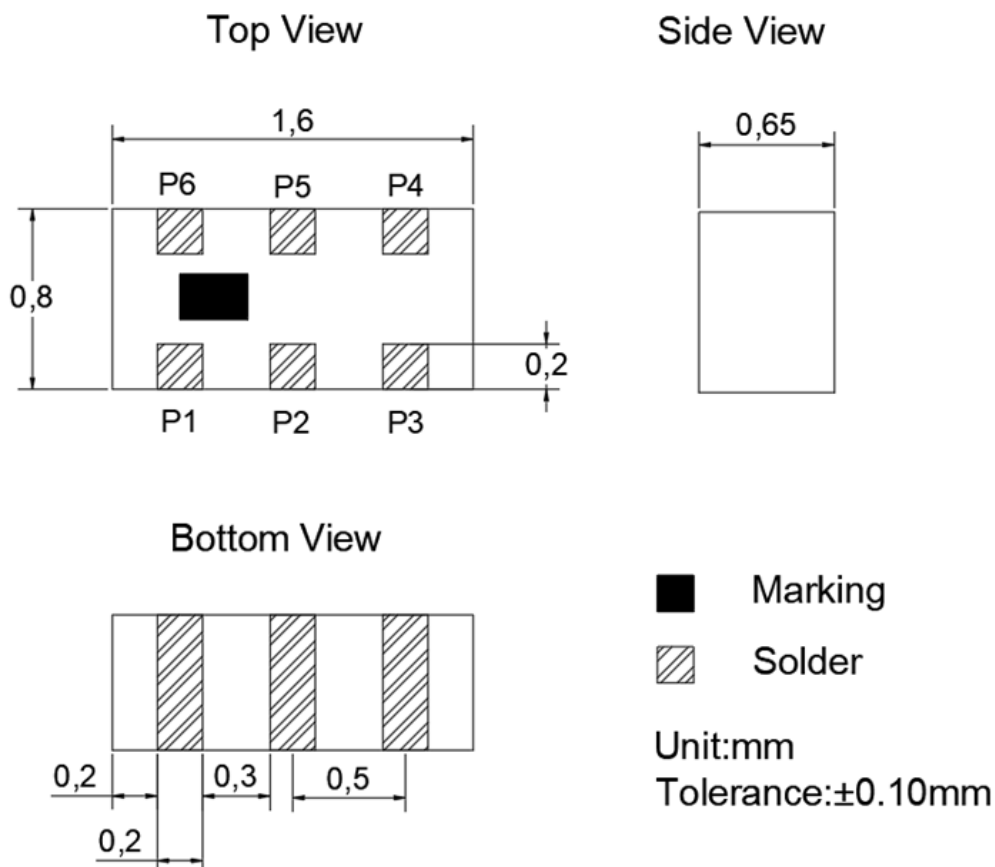
Features

- Low profile, high performance 3dB hybrid coupler
- Surface mount package
- Low insertion loss and tight amplitude and phase balance is required
- LTCC process

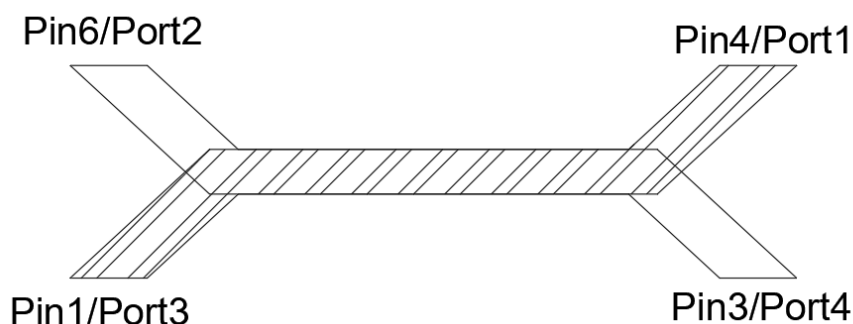
Specifications

NO.	Parameter		SPEC
1	Frequency range		5700~8400 MHz
2	Insertion Loss (avg of coupled outputs above 3.0 dB)	5700~8400 MHz	0.3 dB max.
3	Isolation	5700~8400 MHz	20 dB min.
4	Amplitude Unbalance	5700~8400 MHz	± 0.5 dB
5	Return Loss	5700~8400 MHz	18 dB min.
6	Phase Unbalance	5700~8400 MHz	90 ± 4 degree
7	Power		3W (CW AVG.)
8	Operation Temperature Range		-55℃ ~ +140℃

Dimensions (mm)

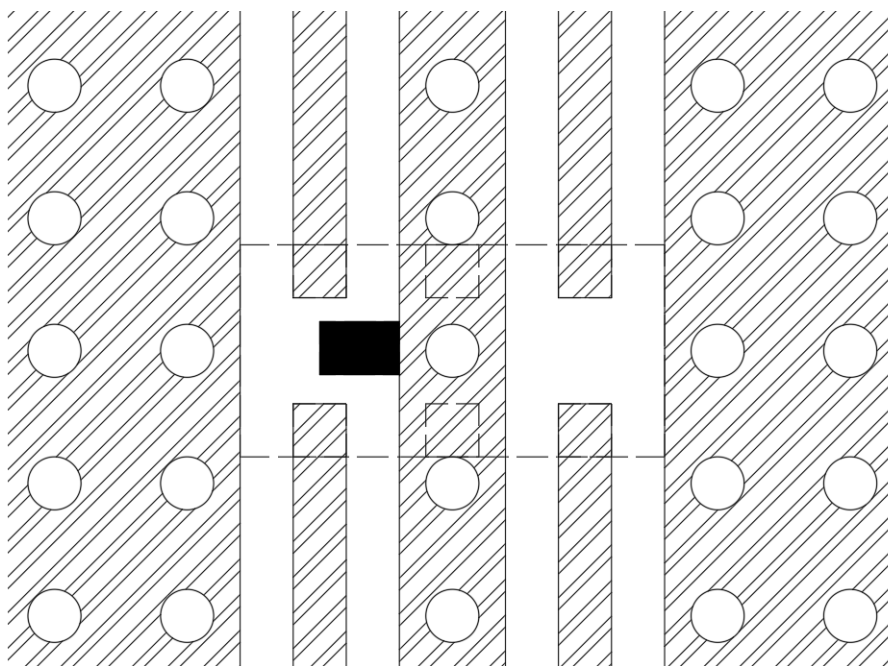


Hybrid Coupler Pin Configuration:



Configuration	Pin4/Port 1	Pin 2	Pin 6/Port2	Pin 1/Port3	Pin 5	Pin 3/Port4
Splitter	Input	GND	Isolated	$-3\text{dB}\angle\theta-90$	GND	$-3\text{dB}\angle\theta$
Splitter	Isolated	GND	Input	$-3\text{dB}\angle\theta$	GND	$-3\text{dB}\angle\theta-90$
Splitter	$-3\text{dB}\angle\theta-90$	GND	$-3\text{dB}\angle\theta$	Input	GND	Isolated
Splitter	$-3\text{dB}\angle\theta$	GND	$-3\text{dB}\angle\theta-90$	Isolated	GND	Input
*Combiner	$A\angle\theta-90$	GND	$A\angle\theta$	Isolated	GND	Output
*Combiner	$A\angle\theta$	GND	Isolated	Output	GND	$A\angle\theta-90$
*Combiner	Isolated	GND	Output	$A\angle\theta-90$	GND	$A\angle\theta$
*Combiner	Output	GND	$A\angle\theta-90$	$A\angle\theta$	GND	Isolated

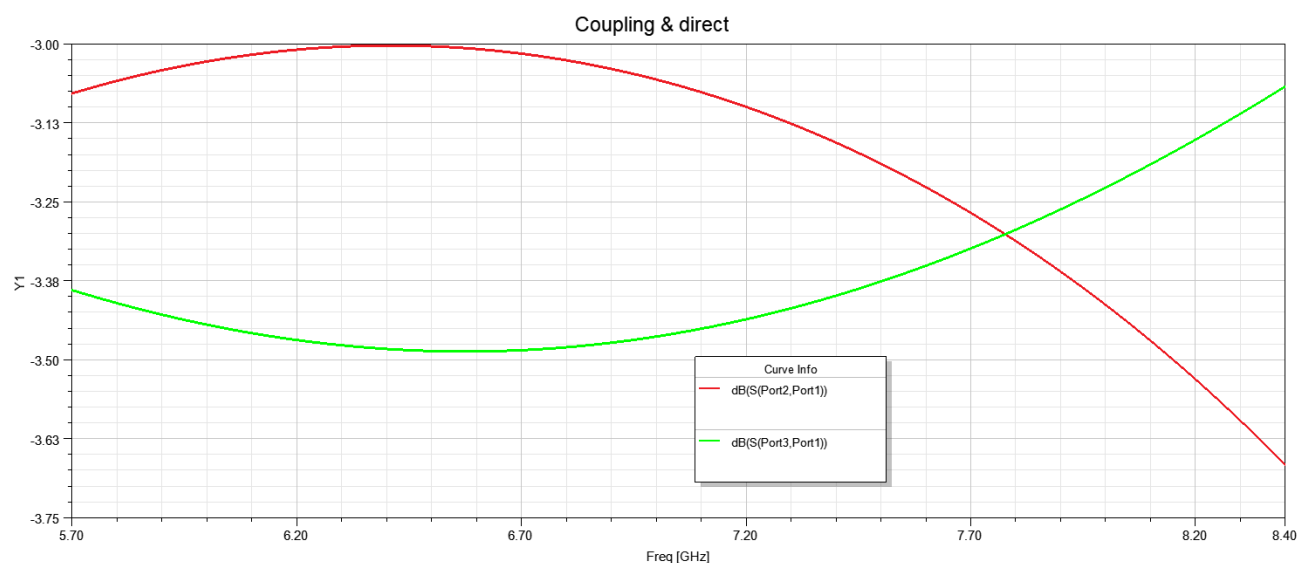
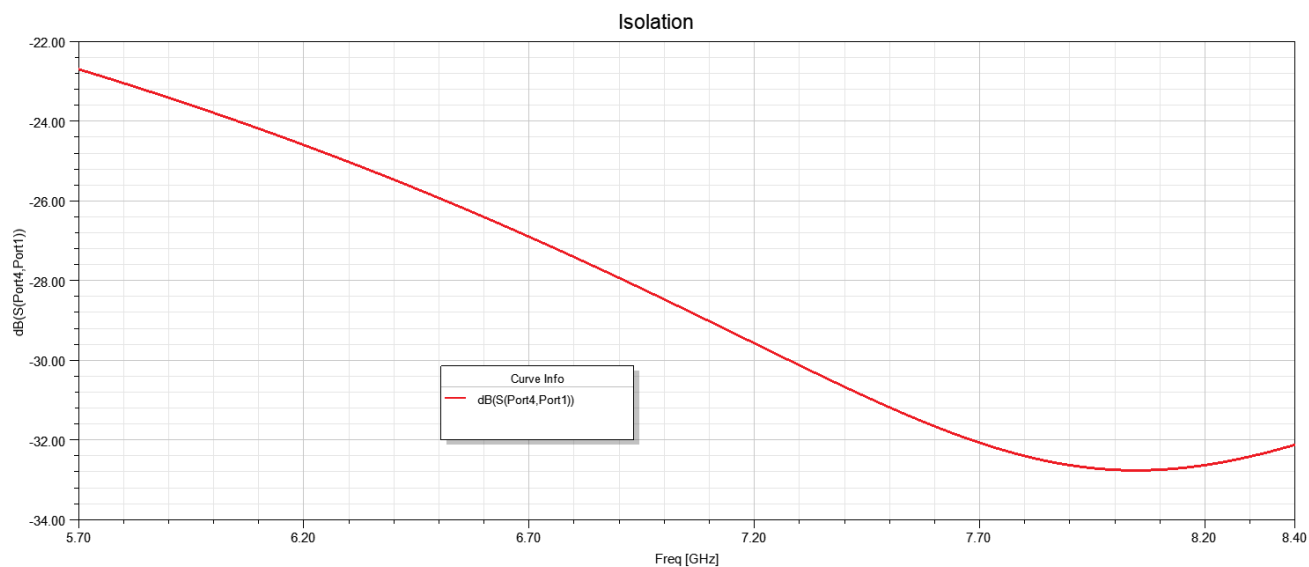
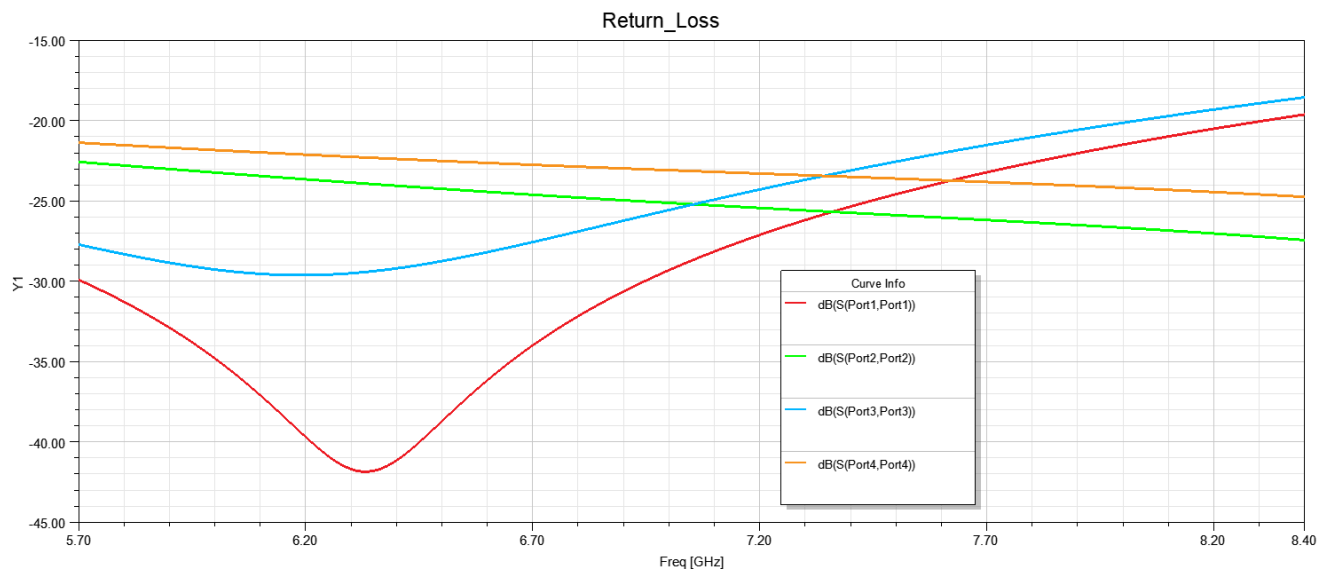
Mounting Considerations



Unit: mm

Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness

Typical Electrical Characteristics (T=25°C)

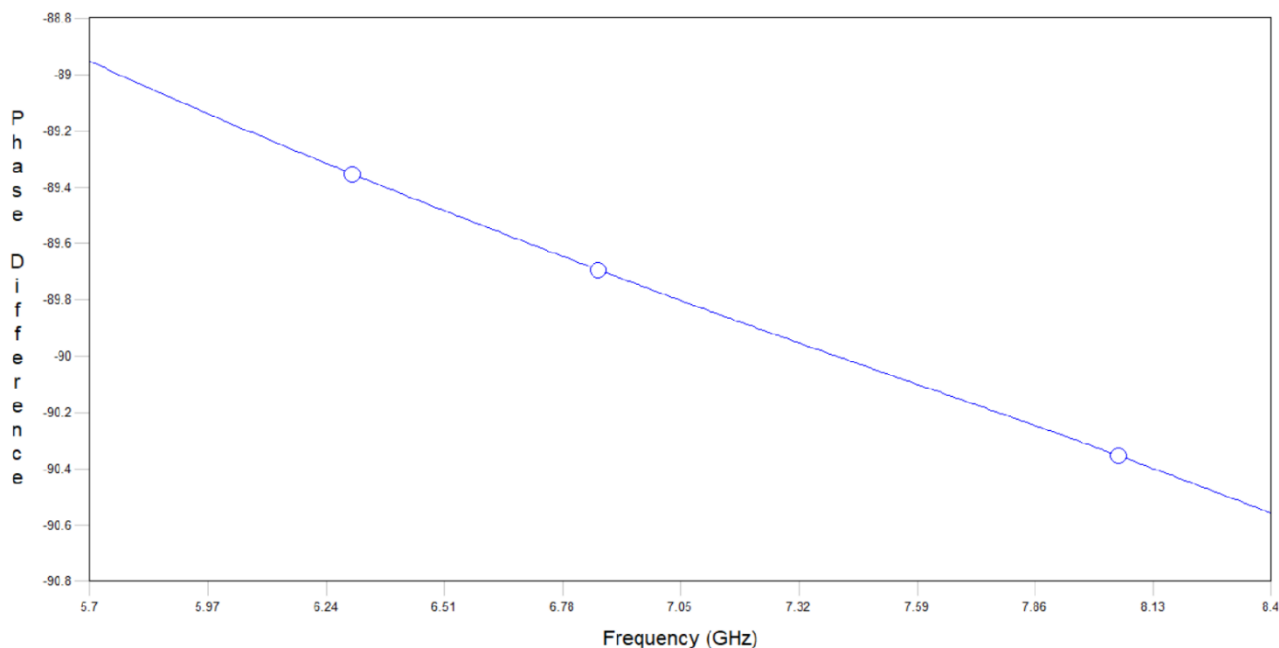


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For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com



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