

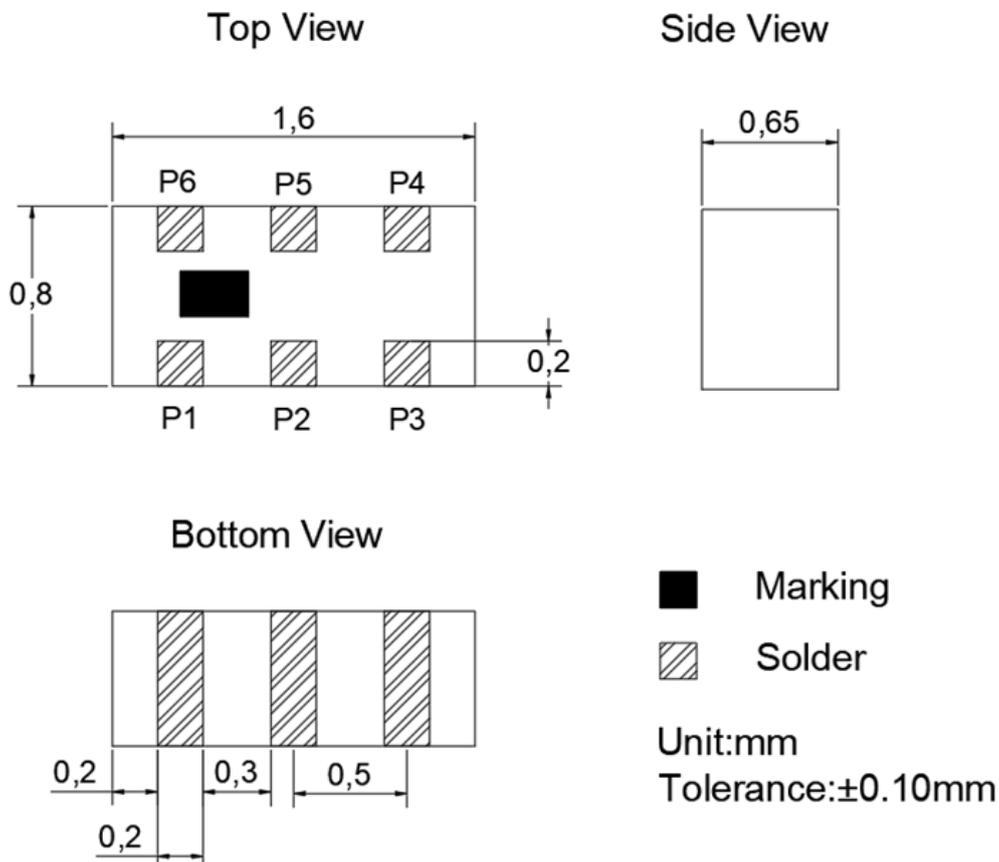
### Features

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

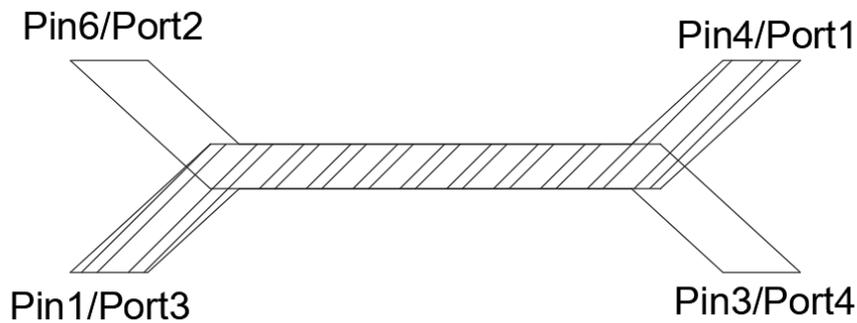
### Specifications

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°C ~ +140°C

### Dimensions (mm)

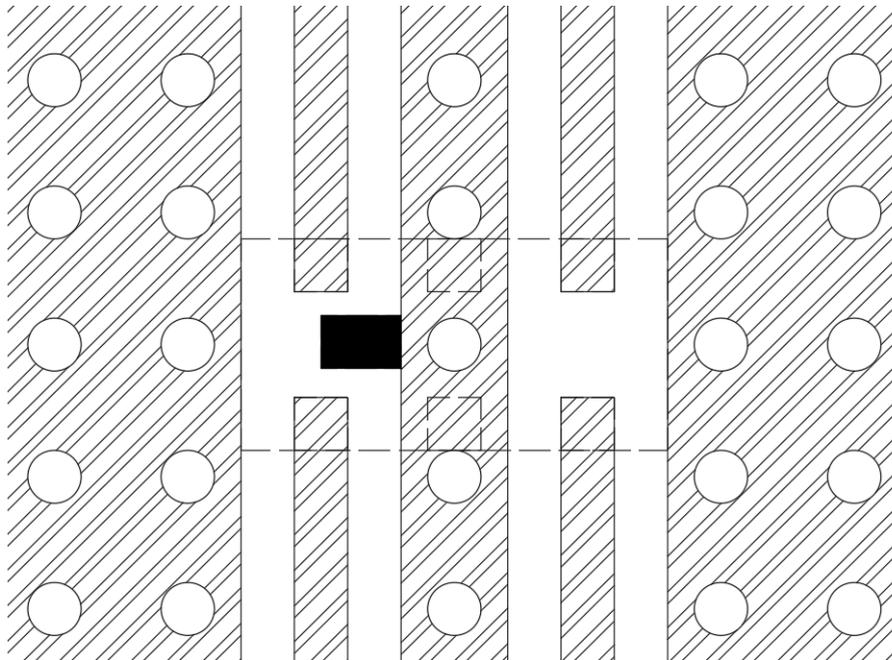


### Hybrid Coupler Pin Configuration:



Configuration	Pin4/Port 1	Pin 2	Pin 6/Port2	Pin 1/Port3	Pin 5	Pin 3/Port4
Splitter	Input	GND	Isolated	$-3dB \angle \theta - 90$	GND	$-3dB \angle \theta$
Splitter	Isolated	GND	Input	$-3dB \angle \theta$	GND	$-3dB \angle \theta - 90$
Splitter	$-3dB \angle \theta - 90$	GND	$-3dB \angle \theta$	Input	GND	Isolated
Splitter	$-3dB \angle \theta$	GND	$-3dB \angle \theta - 90$	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

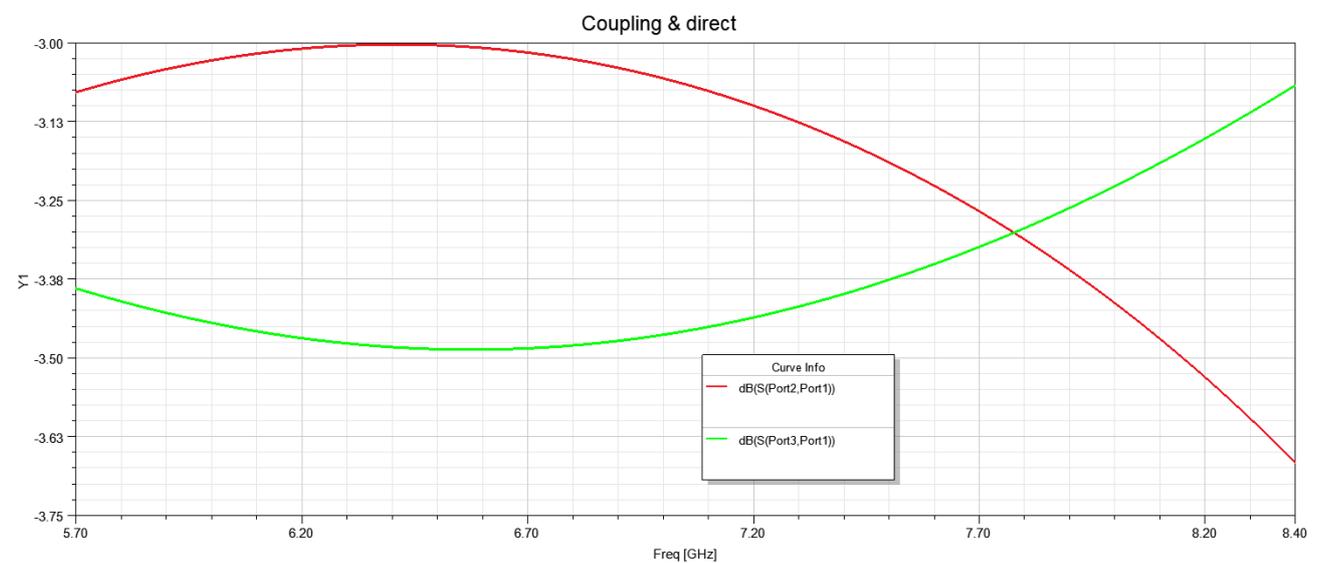
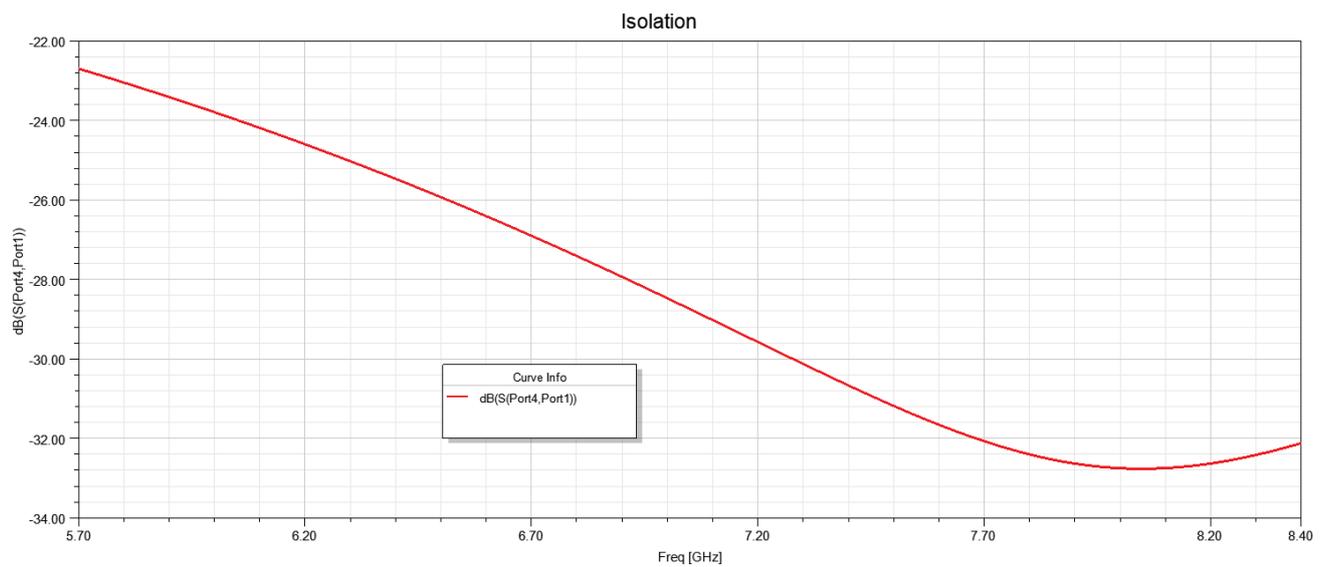
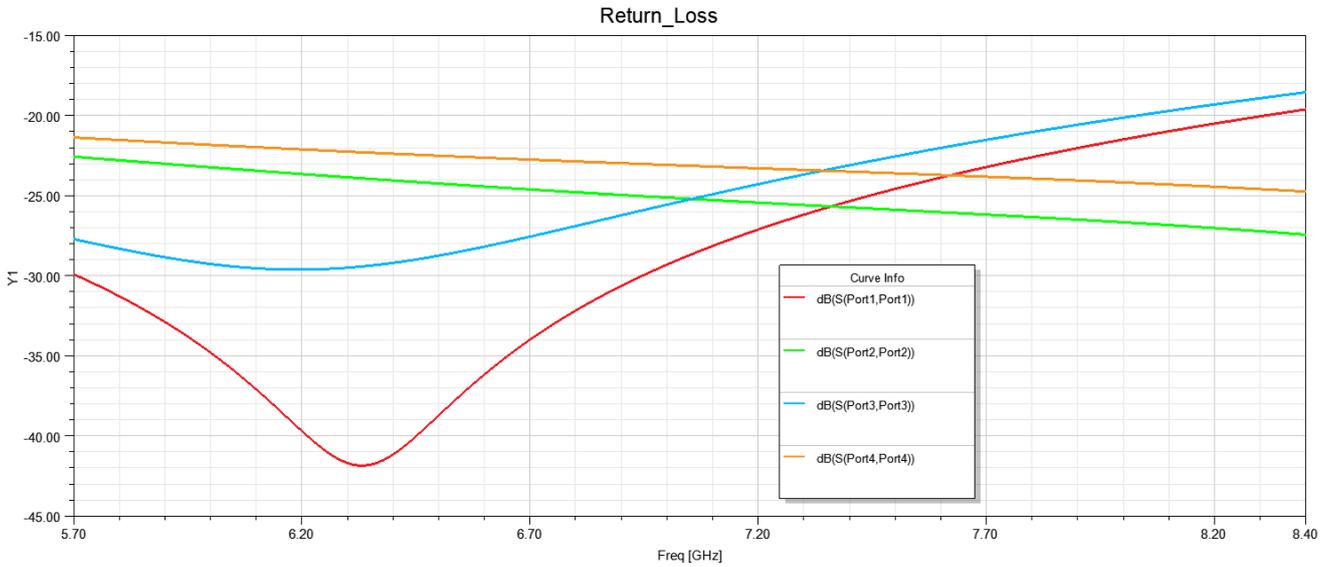
### Mounting Considerations

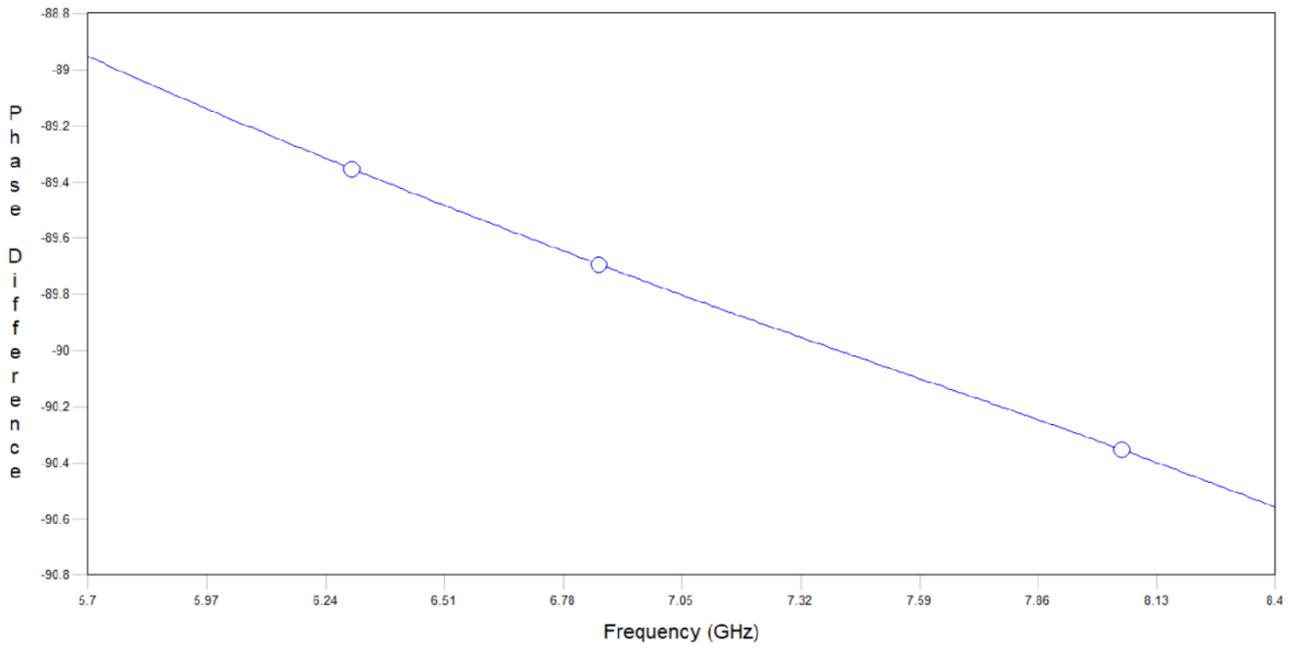


Unit: mm

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

### Typical Electrical Characteristics (T=25°C)





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