

High Frequency Ceramic Solutions

**2.4/5GHz Dual Band Mini RF Coupler. EIA 0202
(0.6x0.5x0.37mm), AEC-Q200 Qualified**

P/N 2450CP05A5400T-AEC

Detail Specification: 8/15/2019

Page 1 of 4

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General Specifications		
Part Number	2450CP05A5400T-AEC	
Freq. Range (MHz)	2400 ~ 2500	4900 ~ 5850
Insertion Loss (dB)	0.5 max.	0.5 max.
VSWR	1.3 max.	1.3 max.
Coupling	19 ± 1.5	12.5 ± 1.5
Directivity	15 min.	
Qty/Reel	10,000 pcs	
Operating Temp Range	-40 to +105 °C	
Power Capacity	4W max.	
Recommended Storage Conditions for unused T&R product	+5 to +35°C Humidity 45~75%RH 18 months max.	



Part Number Explanation				
P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450CP05A5400S-AEC
		T & R	Suffix = T	eg. 2450CP05A5400T-AEC
	Termination style	100% Tin	Suffix = None	eg. 2450CP05A5400(T or S)-AEC
	Evaluation Board	2450CP05A5400-EB1SMA		

*Always mount this component with red mark facing up. It will not function properly if flipped upside down.

Mechanical Dimensions					
	In		mm		
L	0.026	± 0.002	0.65	± 0.05	
W	0.020	± 0.002	0.50	± 0.05	
T	0.015	± 0.002	0.37	± 0.05	
a	0.006	+0.004/-0.002	0.150	+0.1/-0.05	
b	0.009	+0.004/-0.002	0.225	+0.1/-0.05	

<Top view>

<Side>

<Bottom view>

Terminal Configuration			
1	Coupled Out	3	Output
2	50Ω Termination	4	Input

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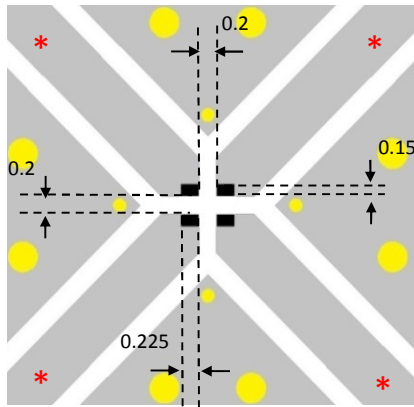
P/N 2450CP05A5400T-AEC

Detail Specification: 8/15/2019

Page 2 of 4

Mounting Considerations

Units in mm



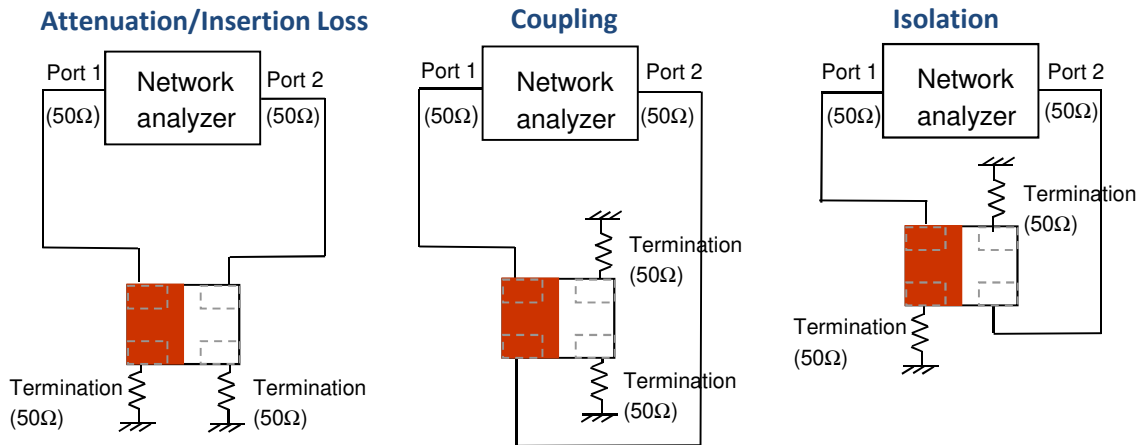
- Solder Resist
- Land
- Through-hole
($\phi 0.15$ and 0.35)

* Line width should be designed to match a 50 Ω characteristic impedance (preferably Grounded CPW), depending on PCB material and thickness.

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Want the layout file of the above? Send us a message at: <https://www.johansontechnology.com/ask-a-question>

Measurement Diagram and Setup



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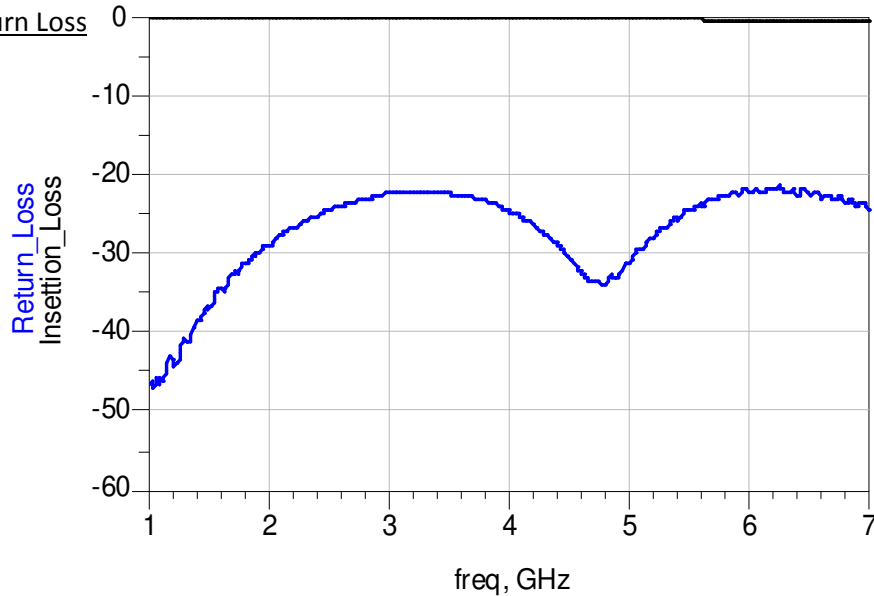
P/N 2450CP05A5400T-AEC

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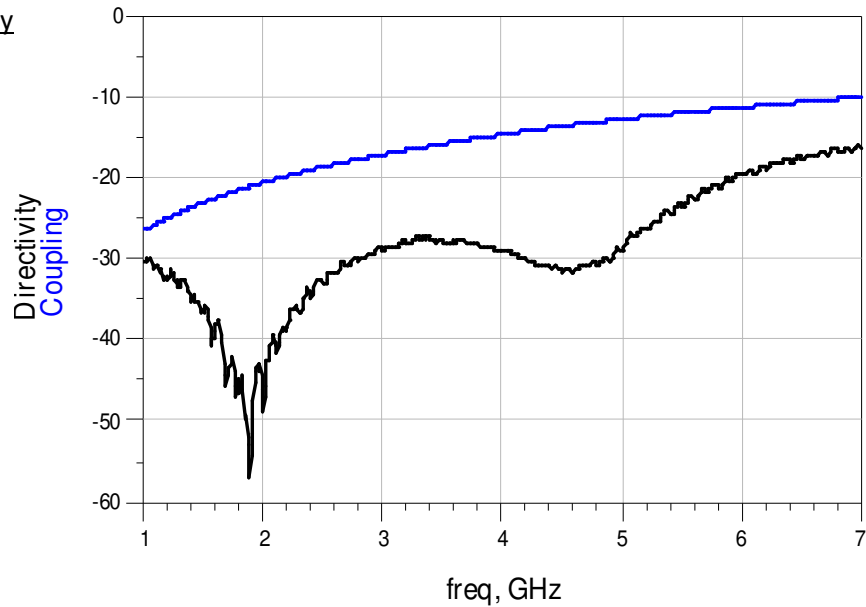
Page 3 of 4

Typical Electrical Characteristics (T=25 °C)

Insertion Loss & Return Loss



Coupling & Directivity



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Page 4 of 4

RoHS Compliance

<https://www.johansontechnology.com/rohs-compliance>

Packaging information

<https://www.johansontechnology.com/tape-reel-packaging>

Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

Layout Files, s-parameters and any other technical questions

<https://www.johansontechnology.com/ask-a-question>

MSL Info

<https://www.johansontechnology.com/msl-rating>

Recommended Storage Condition and Max Shelf Life

<https://www.johansontechnology.com/recommended-storage-conditions>

Need a small SMD chip Antenna?

<https://www.johansontechnology.com/antennas>

Antenna tuning, optimization, and validation services:

<https://www.johansontechnology.com/ipc-antenna-services>

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