

High Frequency Ceramic Solutions

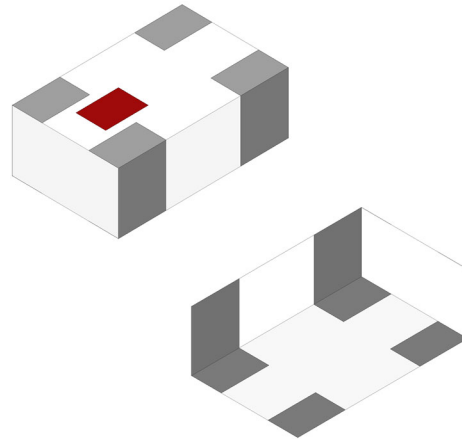
Mini GNSS 3dB Hybrid Coupler, SMD, EIA 0805 for GPS,
GLONASS, BEIDOU, GALILEO

P/N 1585CH15A0070

Detail Specification: 3/29/2019

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General Specifications	
Part Number	1585CH15A0070
Freq. Range (MHz)	1550 - 1620
Insertion Loss (dB)	3.3 ± 0.5
Return Loss (dB)	10 min.
Phase Balance	90° ± 3
Amplitude Balance (dB)	1.0 max.
Isolation (dB)	16 min.
Operating Temp. Range	-40°C to +85°C
Power Capacity (W)	3 max. (CW)
Recommended Storage Conditions for Unused Product on T&R	+5 to +35 °C Humidity 45 - 75%RH 18 months max.
Qty/Reel	4000pcs



Part Number Explanation				
P/N Suffix	Packing Style	Bulk	Suffix = S	e.g. 1585CH15A0070S
		T & R	Suffix = E	e.g. 1585CH15A0070E
	Termination style	100% Tin	Suffix = None	e.g. 1585CH15A0070(S or E)
	Evaluation Board	1585CH15A0070-EB1SMA		

Mechanical Dimensions				
	In			mm
L	0.079	±	0.004	2.00 ± 0.10
W	0.049	±	0.004	1.25 ± 0.10
T	0.028	±	0.004	0.70 ± 0.10
a	0.022	±	0.010	0.56 ± 0.25
b	0.014	±	0.006	0.35 ± 0.15

<Bottom View>

<Side View>

Terminal Configuration	
1	Termination
2	Input
3	OUT2
4	OUT1



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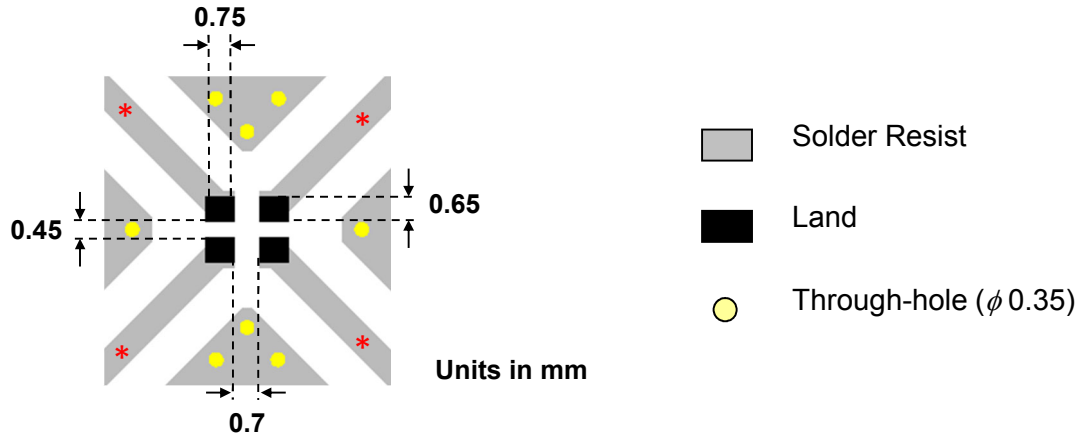
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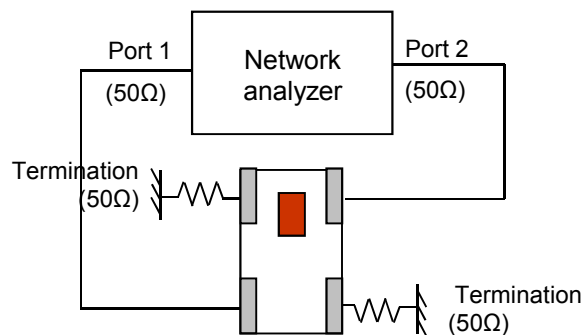
Mounting Consideration



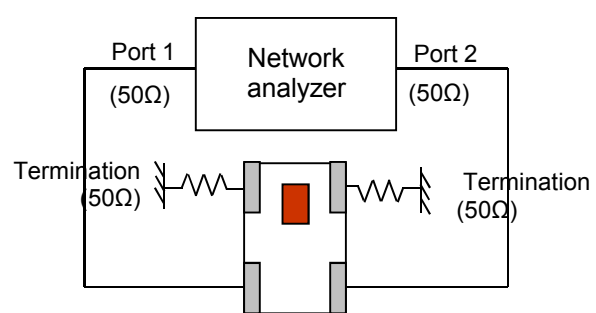
* Line width should be designed to match 50W characteristic impedance, depending on PCB material and thickness.

Measuring Diagram

Insertion Loss 1 & Return Loss



Insertion Loss 2 & Return Loss



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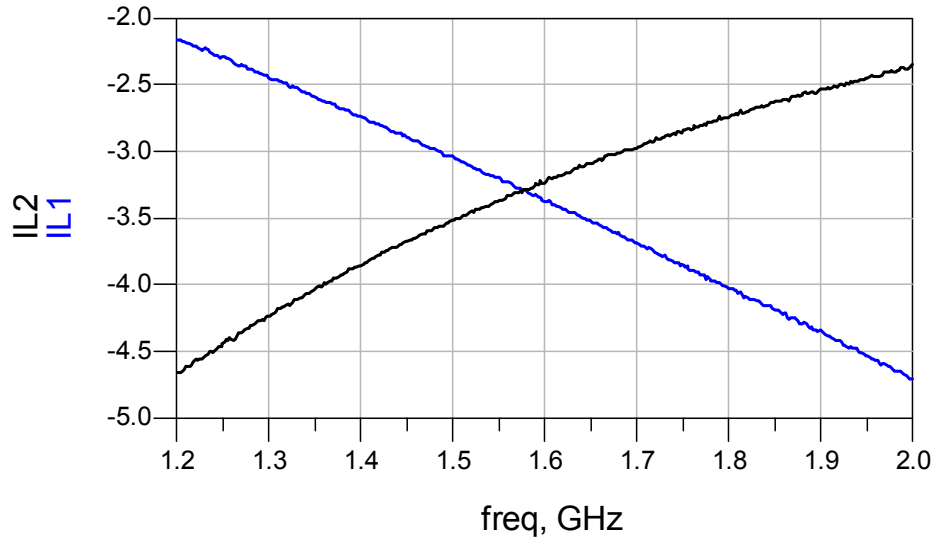
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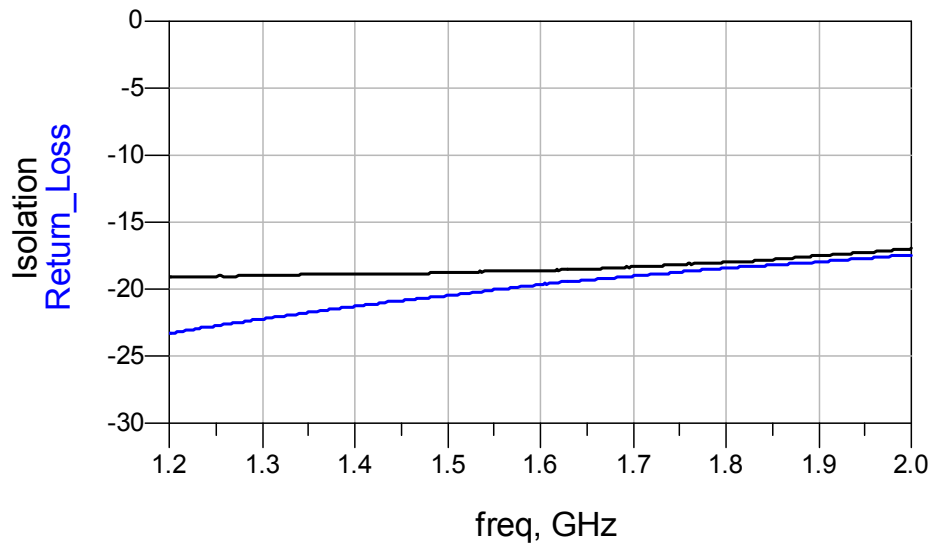
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Electrical Characteristics (T=25 °C)

Insertion Loss 1 & 2



Return Loss & Isolation



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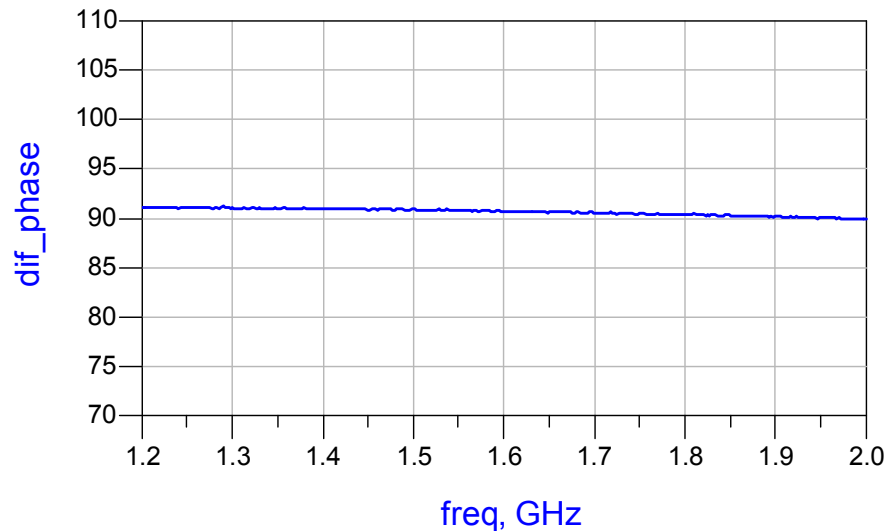
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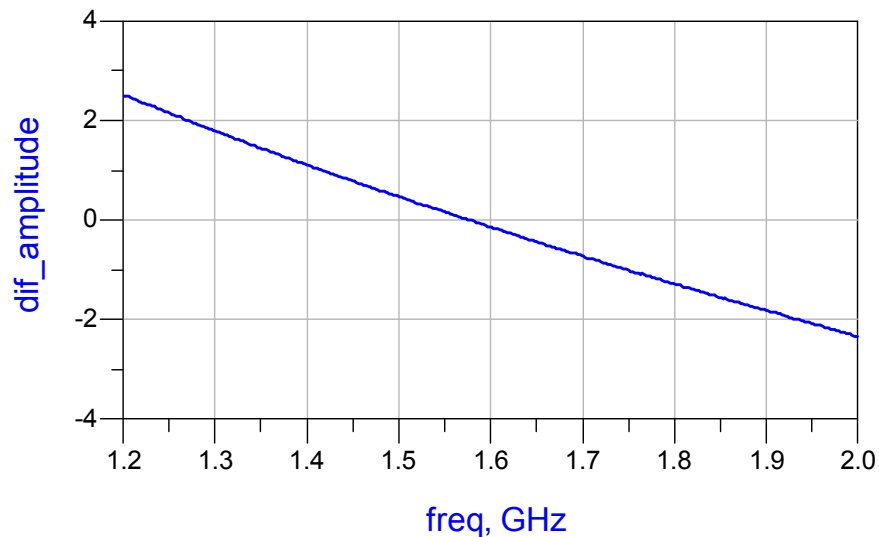
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Electrical Characteristics (T=25 °C)

Phase Balance



Amplitude Balance



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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 GNSS chip Antenna?

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

Antenna layout and tuning techniques

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

Antenna layout review, tuning, and characterization services

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

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