



PRODUCT DATA SHEET

QH10148

Our patented 3 dB 90° Hybrid Couplers provide:

- Superior component performance starting at 3:1 Bandwidth.
- Thicker center boards for high power and increased repeatability.
- Bonded structures which eliminate any air gaps between substrates.
- More sections per bandwidth for better coupling flatness.
- Electrically shorter and physically smaller RF components.

Features:

High Power

Wide Bandwidths

Small Size

Excellent Amplitude Balance

Electrical Specifications:

Frequency:	2000 - 6000 MHz
Power:	100 W CW
Insertion Loss	0.3 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	± 7° dB Max.
Amplitude Balance:	± 0.5 dB Max.
Isolation:	20 dB Min.

Mechanical Specifications:

Type:	Surface Mount
Plating Options:	QH10148-Ag: Immersion Silver (RoHS) QH10148-Pb: Electrodeposited Tin/Lead
Size:	0.744 x 0.450 x 0.079"
Weight:	1.4 oz

Port Configurations:

J1

Input
-3 dB, 0°
-3 dB, -90°
Isolated

J2

Input
Isolated
-3 dB, -90°

J3

-3 dB, -90°
Isolated
Input
-3 dB, 0°

J4

Isolated
-3 dB, -90°
-3 dB, 0°
Input

Werlatone's breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the difference port is internally terminated with a high power termination. This eliminates the need for a customer supplied external load for each Hybrid Coupler.



WERLATONE

Model QH10148

90° Hybrids Surface Mount (SMT) & Drop

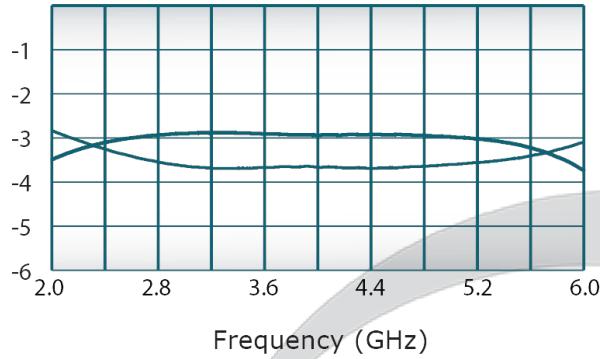


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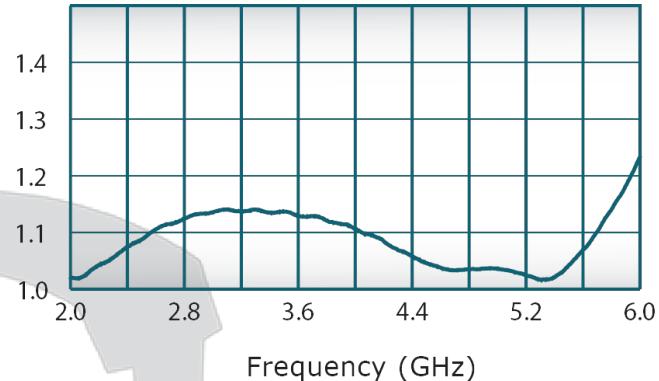
QH10148

Performance Data (Specifications subject to change without notice):

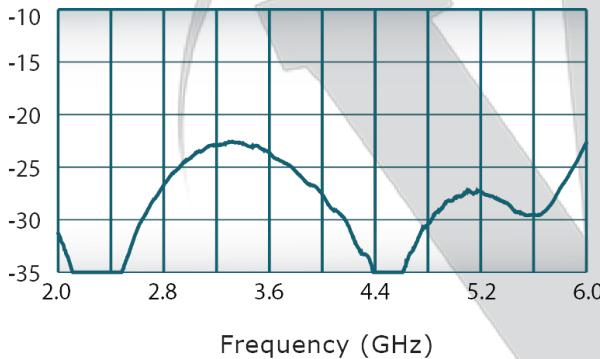
Coupling:



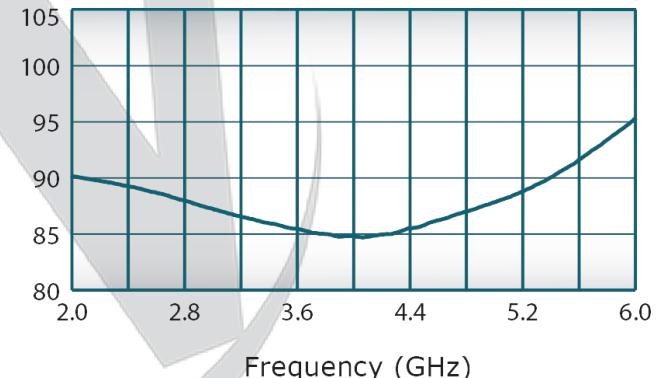
VSWR:



Isolation:



Phase Balance:



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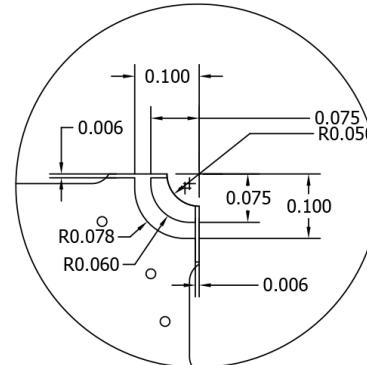
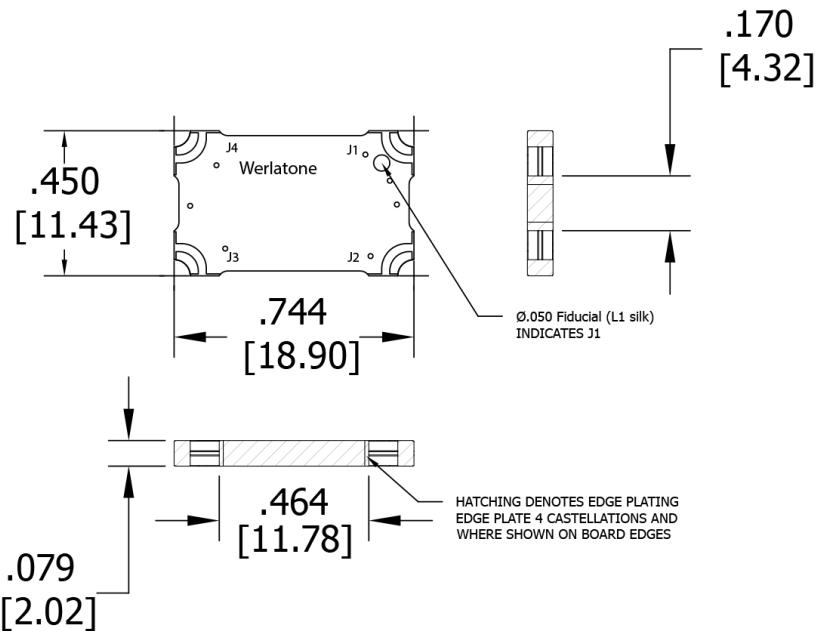
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REVISION HISTORY

REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/12/2015	BW
A	ECN 8808	4/21/15	BW

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UNLESS OTHERWISE SPECIFIED		DWN	DATE	W WERLATONE SINCE 1965		17 Jon Barrett Rd
•	INTERPRET DRAWING IAW MIL-STD-100	GP	4/21/15			Patterson, NY 12563
•	DIMENSIONING AND TOLERANCING ASME Y14.5M-2009	CHK	DATE			
•	PARTS ARE DRAWN IN INCHES FOR REFERENCE ONLY	ENGR	DATE	TITLE		
•	DIMENSIONS ARE IN INCHES (mm)	MFGR	DATE			
•	DIMENSIONAL LIMITS APPLY BEFORE	QA	DATE	SIZE	CAGE CODE	DWG NO
•	PROCESSES	RLSE	DATE	A	28812	21241-500
•	TOLERANCES: ANGLES \pm 3° 3 PL \pm .010 [.25] 2 PL \pm .015 [.4]			REV		
THIRD ANGLE PROJECTION				2:1		SHEET 1 OF 1

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