

PRODUCT DATA SHEET

QH8849

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: 80 - 1000 MHz
 Power: 250 W CW
 Insertion Loss: 0.65 dB Max.
 VSWR: 1.40:1 Max.
 Phase Balance: 90° ± 5° dB Max.
 Amplitude Balance: ± 1.0 dB Max.
 Isolation: 16 dB Min.

Mechanical Specifications:

Type: Surface Mount
 Plating Options: QH8849-Ag: Immersion Silver (RoHS Compliant)
 Weight: 2.7 oz.
 Size: 2.9 x 2.1 x 0.31"

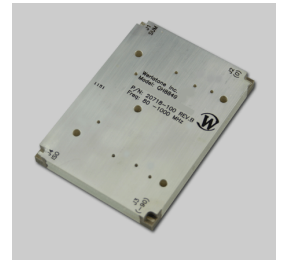
Port Configurations:

J1	J2	J3	J4
Sum	0°	90°	Isolated Port

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.

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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

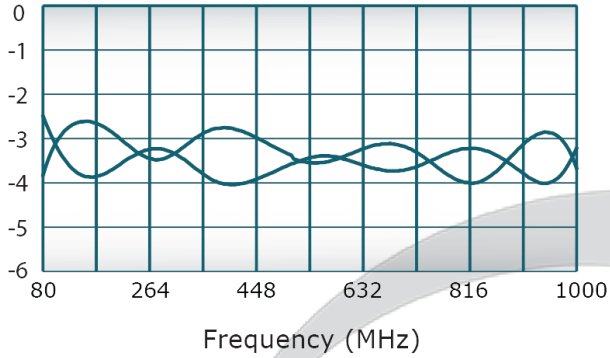


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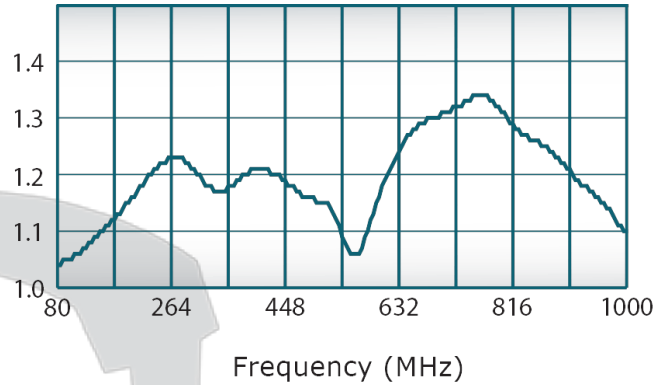
QH8849

Performance Data (Specifications subject to change without notice):

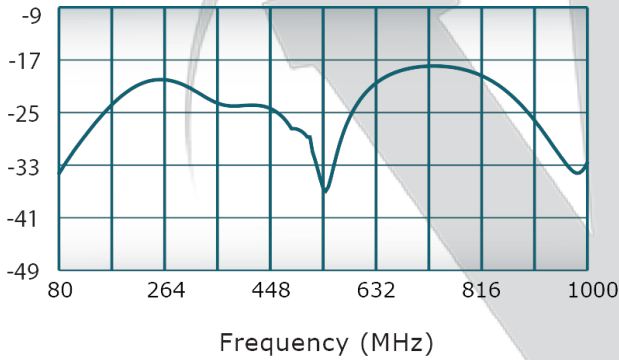
Coupling:



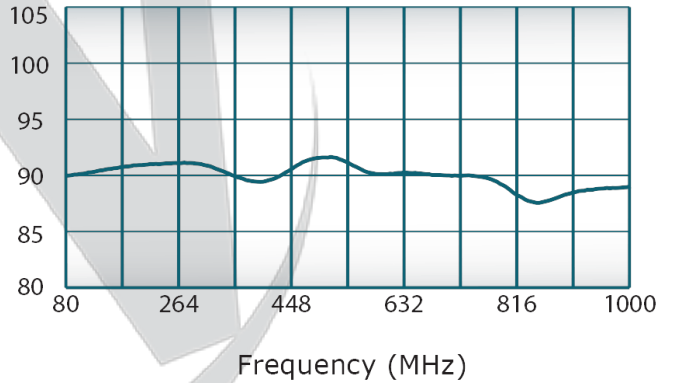
VSWR:



Isolation:



Phase Balance:



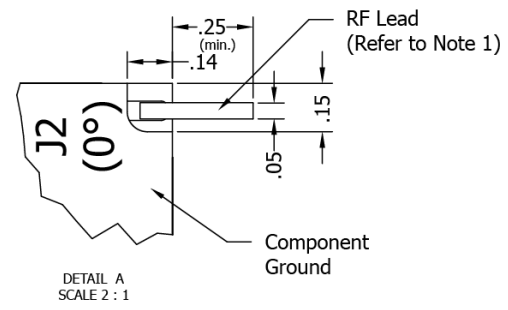
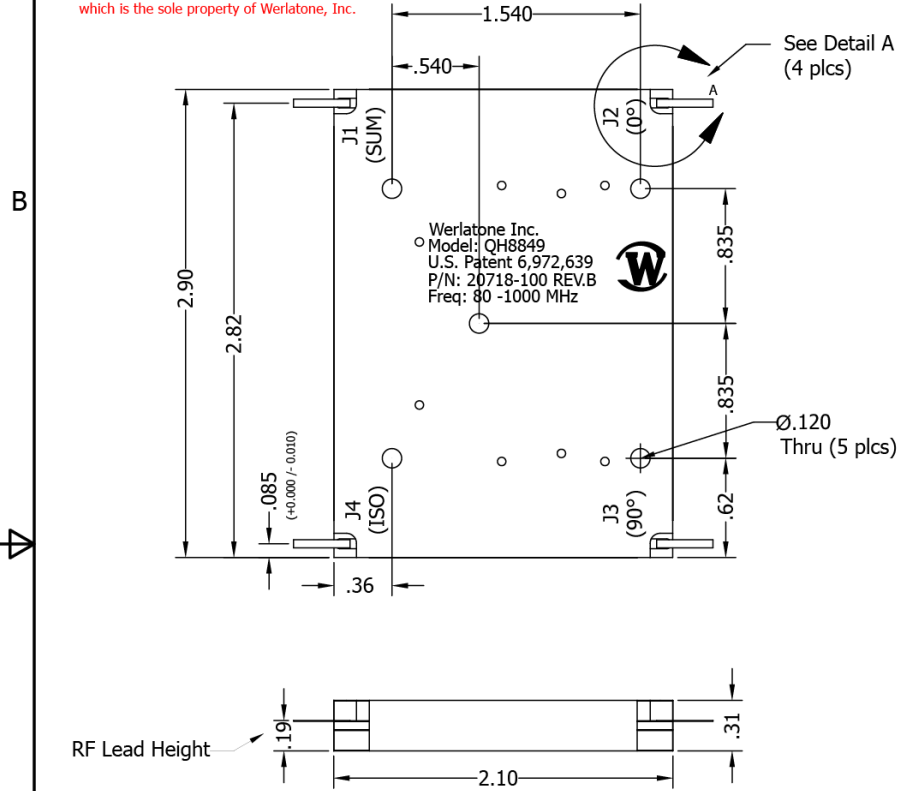
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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	Initial Rls	1/18/2016	BW



ELECTRICAL SPECIFICATIONS

Frequency:	80 - 1000 MHz
Power:	250 Watts CW
Insertion Loss:	0.65 dB
Amplitude Balance:	± 1.0 dB
Phase Balance:	90° ± 5° Max.
VSWR:	1.4:1
Isolation:	16 dB Min.
Operating Temperature:	-55°C To +85°C

NOTES: UNLESS OTHERWISE SPECIFIED

- RF LEAD MATERIAL: 99.95% PURE SILVER. .005 THICK. LEAD IS RESISTANCE WELDED TO EXPOSED COPPER STRIPLINE TRACE.
- Component Surface Finish: Immersion Silver
- Non-Operating Storage Temperature -55C to +100 C

21396-300	QH8849-Ag-T
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
 • INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100
 • DIMENSIONING PER ASME Y14.5M-2009
 • PARENTHESES ARE IN INCHES
 • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
 • TOLERANCES: ANGLES ± 2°
 3 PL ± .005
 2 PL ± .015
 THIRD ANGLE PROJECTION

DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
NH	01/18/16				
CHK	DATE	Outline			
GP	01/18/16				
ENGR	DATE	SIZE	CAGE CODE	DWG NO	REV
BW	01/18/16	A	28812	21396-500	-
MFGR	DATE	SCALE	1:1		SHEET 1 OF 1
QA	DATE				
RLSE	DATE				

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