

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 Connectorized Drop-In & Surface Mount

Electrical Specifications:

Frequency:	200 - 1000 MHz
Power:	200 W CW
Insertion Loss	0.4 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	90° ± 5° dB Max.
Amplitude Balance:	± 0.7 dB Max.
Isolation:	18 dB Min.

Mechanical Specifications:

Type:	Surface Mount
Plating Options:	QH11643-Pb: Electrodeposited Tin/Lead QH11643-Sn: Immersion Tin (RoHS Compliant) QH11643-Ag: Immersion Silver (RoHS Compliant)
Size:	2.8 x 0.75 x 0.16"

Port Configurations:

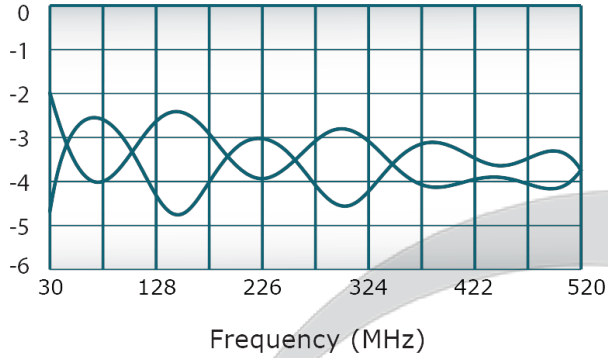
J1	J2	J3	J4
Input	3 dB, 0°	3 dB, -90°	Isolated
3 dB, 0°	Input	Isolated	3 dB, -90°
3 dB, -90°	Isolated	Input	3 dB, 0°
Isolated	3 dB, 90°	3 dB, 0°	Input

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.

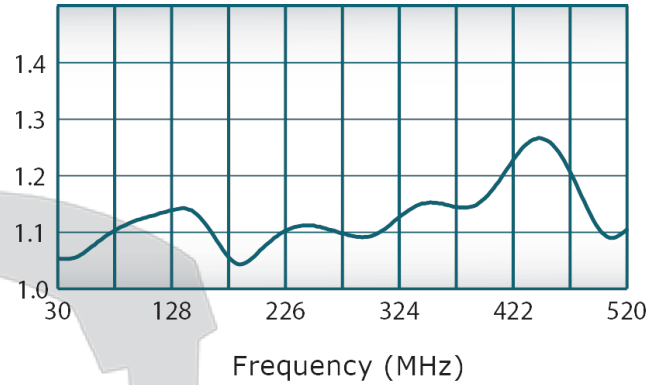


Performance Data (Specifications subject to change without notice):

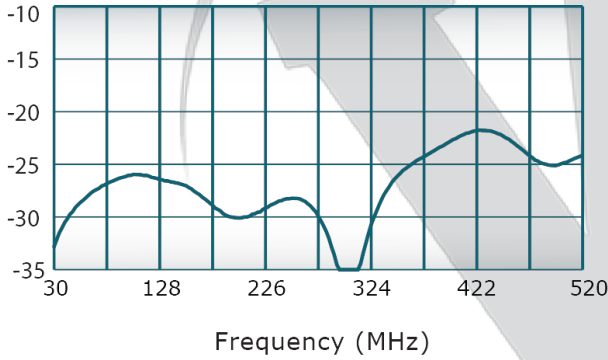
Coupling:



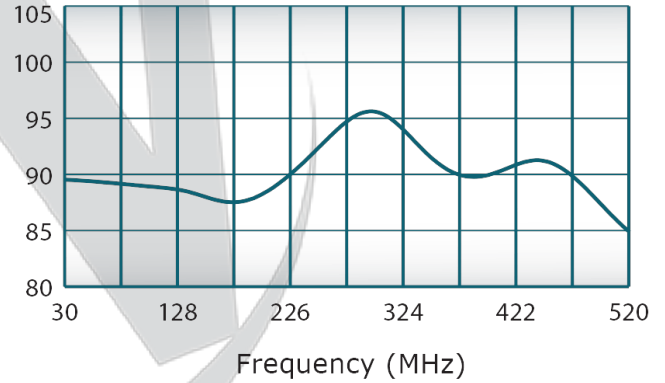
VSWR:



Isolation:



Phase Balance:



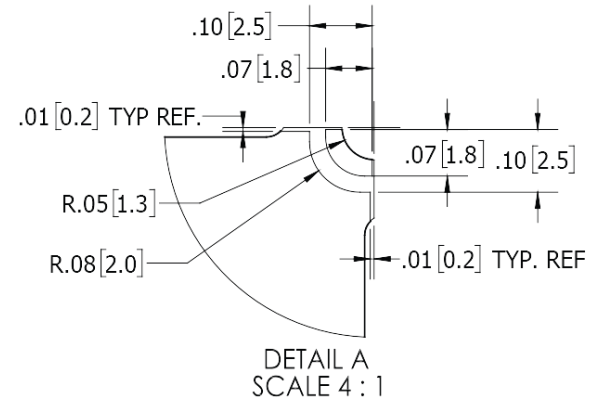
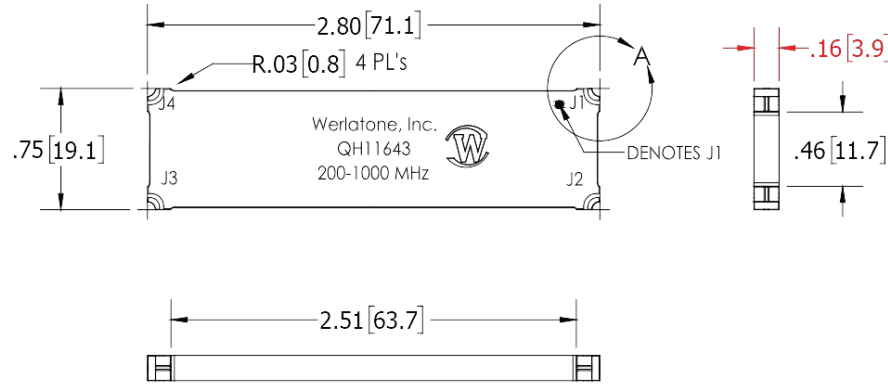
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Werlatone, Inc.

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REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE	3/9/2018	BW
A	ECN 9543	3/30/2018	BW



FINISH	
P/N	TYPE
QH11643-Ag	RoHS Imm. Silver
QH11643-Au	RoHS Nickel Gold
QH11643-Pb	ED Tin/Lead
QH11643-Sn	RoHS Imm. Tin

PORT CONFIGURATIONS			
J1	J2	J3	J4
Input	3 dB, 0°	3 dB, -90°	Isolated
3 dB, 0°	Input	Isolated	3 dB, -90°
3 dB, -90°	Isolated	Input	3 dB, 0°
Isolated	3 dB, -90°	3 dB, 0°	Input

NOTES: UNLESS OTHERWISE SPECIFIED
 1. SEE SMT APPLICATION NOTE FOR FURTHER INFORMATION

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
* INTERPRET DRAWING IAW MIL-STD-100 * DIMENSIONING PER ASME Y14.5M-2009 * PARENTHETICAL BUFO FOR REF ONLY * DIMENSIONS ARE IN INCHES * DIMENSIONAL LIMITS APPLY BEFORE PROCESSING		GP	3/9/2018		
TOLERANCES:		CHK	DATE	TITLE	
ANGLES ± 2° 3 PL ± .005 2 PL ± .015		PR	3/9/2018	OUTLINE, QH11643 90° HYBRID COUPLER, 200-1000 MHz, 200 W	
* REMOVE BURRS AND SHARP EDGES R.01 MAX * CONCENTRICITY MACHINED DIA: .002 FIM * MACHINE TOOL MISMATCH .003 MAX		ENGR	DATE	SIZE	CAGE CODE
NEXT ASSY	QH11643	MPGR	DATE	A	28812
APPLICATION	USED ON	QA	DATE	DWG NO	21596-500
		RLSE	DATE	SCALE	1:1
THIRD ANGLE PROJECTION				SHEET	1 OF 1

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