

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"

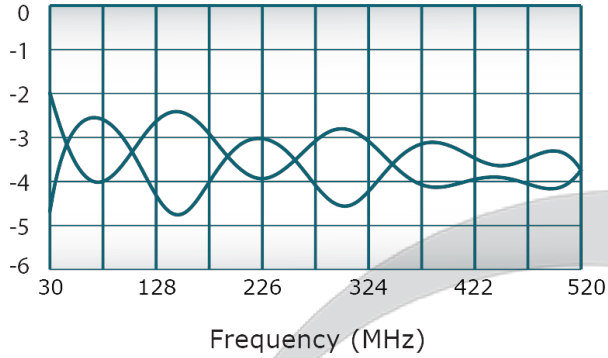
Port Configurations:

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

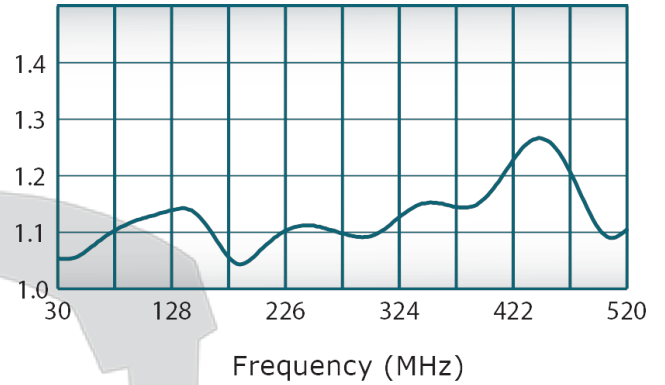
Werlatone's breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the 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):

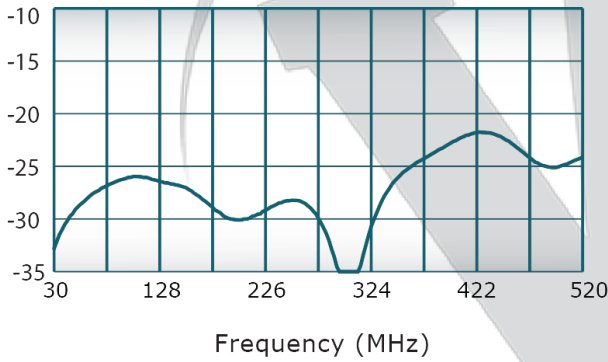
Coupling:



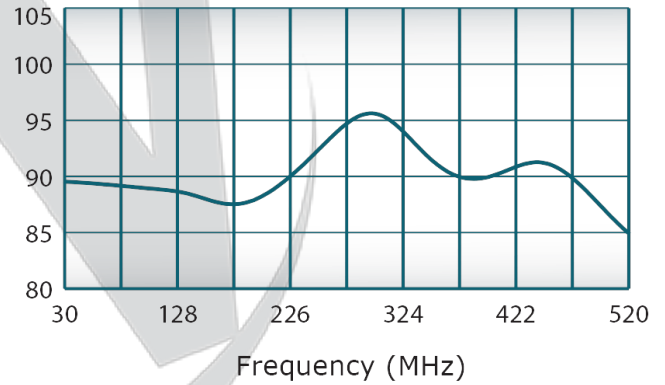
VSWR:



Isolation:



Phase Balance:



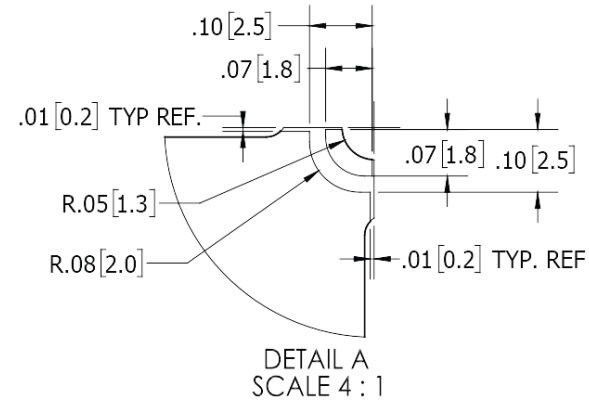
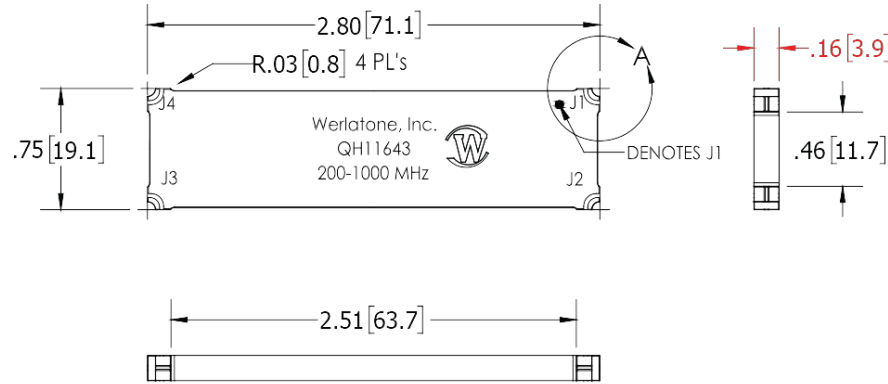
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

Werlatone, Inc.

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

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Werlatone, Inc.

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 BUFD 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
USED ON		QA	DATE	DWG NO	21596-500
APPLICATION		RLSE	DATE	SCALE	1:1
THIRD ANGLE PROJECTION				SHEET	1 OF 1

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com