

PRODUCT DATA SHEET

QH11643

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: $90^\circ \pm 5^\circ$ 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.

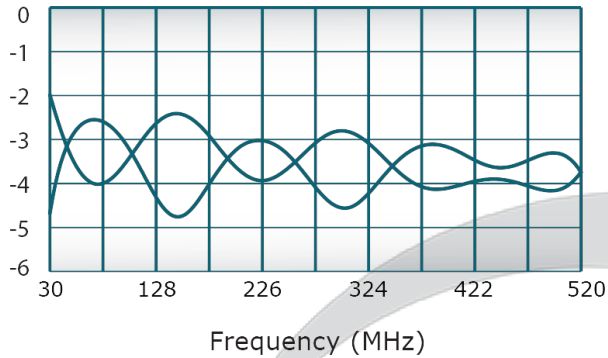


PRODUCT DATA SHEET

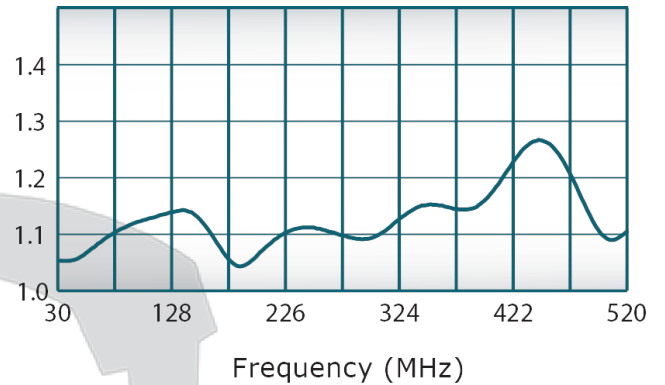
QH11643

Performance Data (Specifications subject to change without notice):

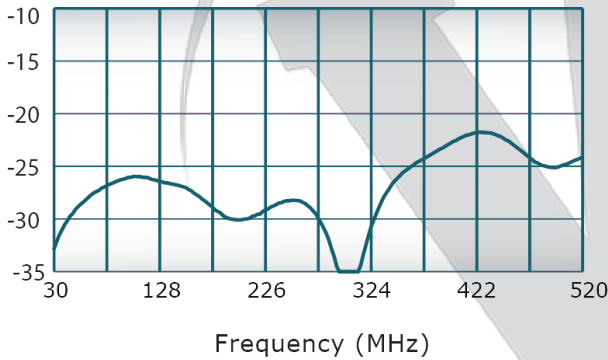
Coupling:



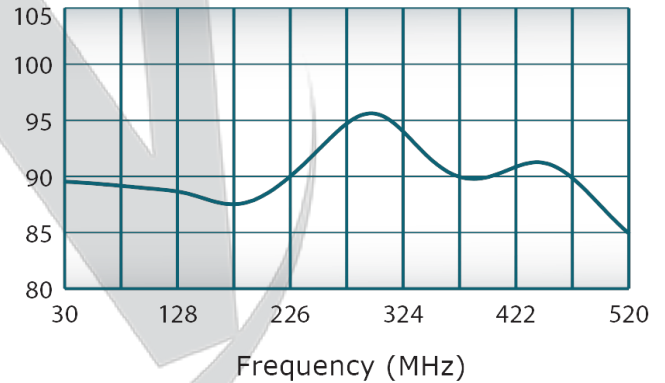
VSWR:



Isolation:



Phase Balance:

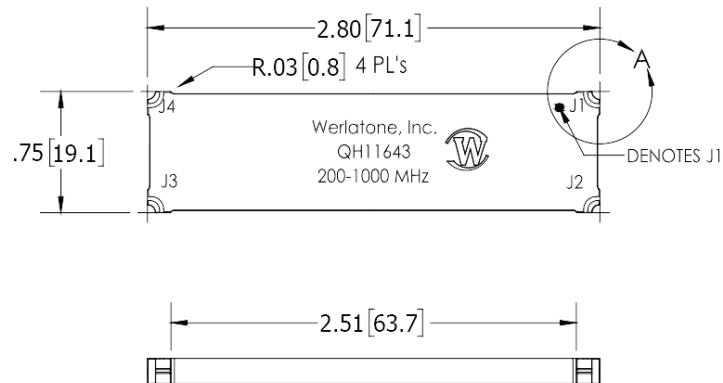


Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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.



Werlatone, Inc.
QH11643
200-1000 MHz

DENOTES J1

REVISION HISTORY

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

DETAIL A
SCALE 4 : 1

NOTES: UNLESS OTHERWISE SPECIFIED

- SEE SMT APPLICATION NOTE FOR FURTHER INFORMATION

P/N	FINISH 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

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

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