
**PRODUCT DATA SHEET**
**QH10541**
**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:	700 - 6000 MHz
Power:	150 W CW
Insertion Loss	0.5 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	± 5° dB Max.
Amplitude Balance:	± 1.5 dB Max. (700-900 MHz) ± 0.6 dB Max. (900-6000 MHz)
Isolation:	17 dB Min.

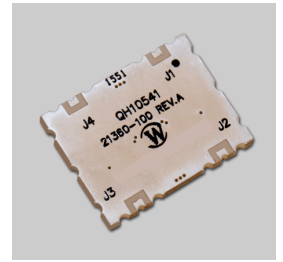
**Mechanical Specifications:**

Type:	Surface Mount
Plating Options:	QH10541-Ag: Immersion Silver (RoHS)
Size:	0.66 x 0.86 x 0.09"
Operating Temperature:	-55°C to +75°C
Weight:	0.1 lb

**Port Configurations:**

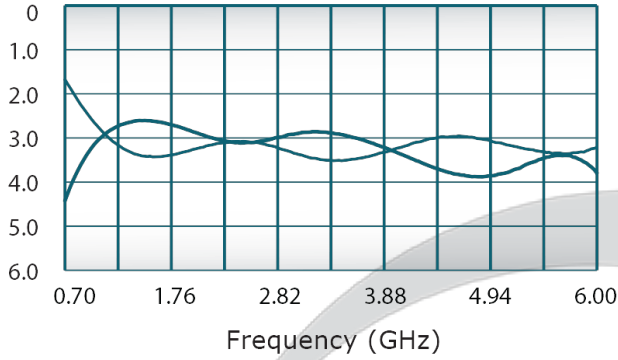
<b>J1</b>	<b>J2</b>	<b>J3</b>	<b>J4</b>
Input	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Input

**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.

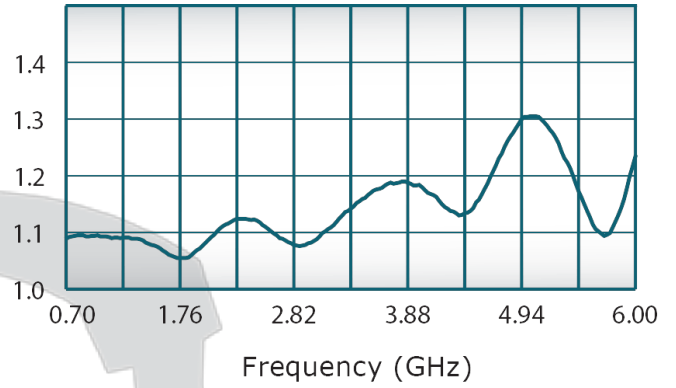


## Performance Data (Specifications subject to change without notice):

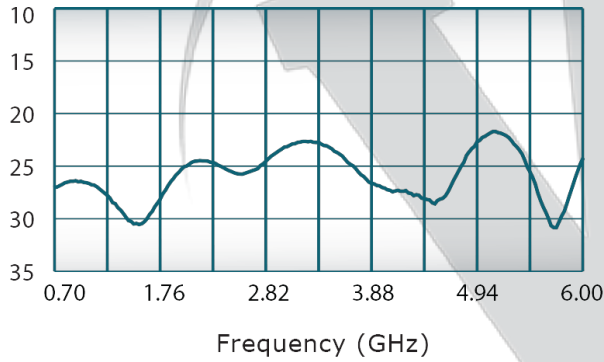
Coupling:



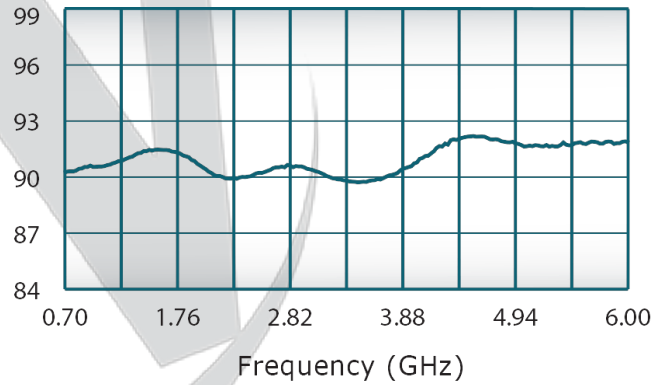
VSWR:



Isolation:

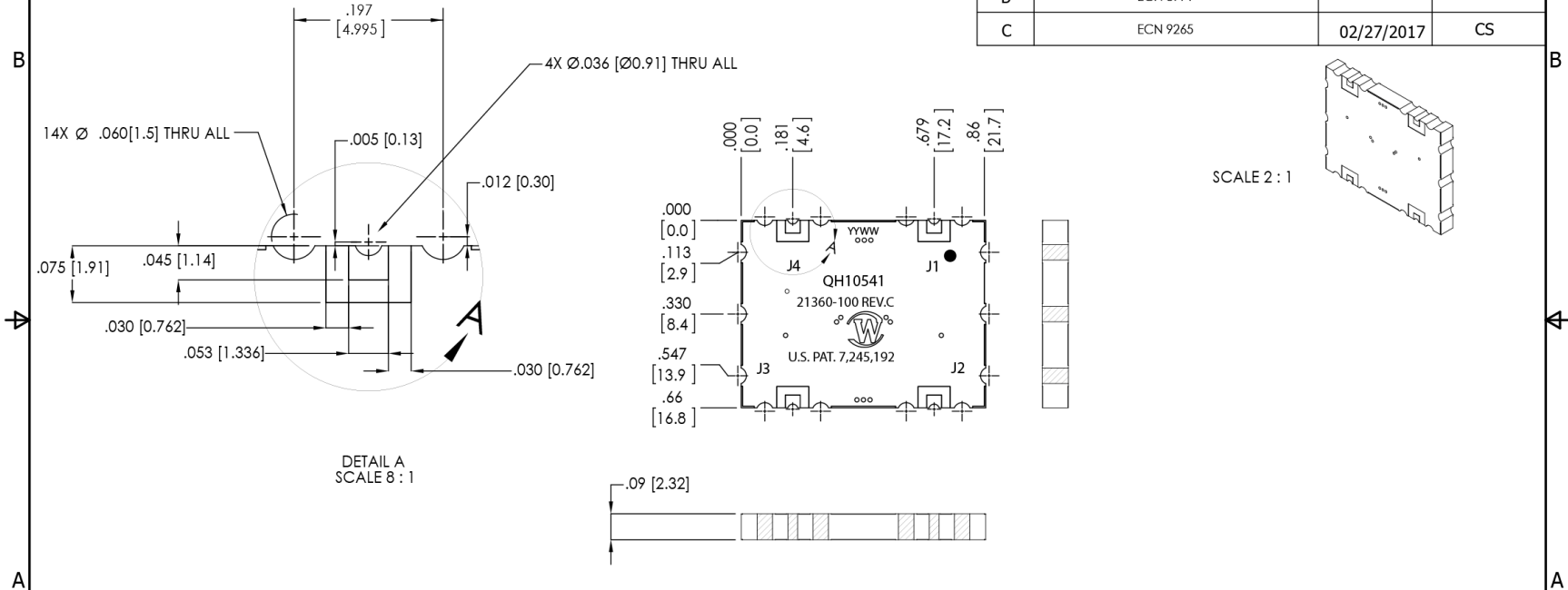


Phase Balance:



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

REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	PRE-RELEASE		
A	ECN 8956		
B	ECN 8991		
C	ECN 9265	02/27/2017	CS



UNLESS OTHERWISE SPECIFIED		OWN	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		CHK	DATE	
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		ENGR	DATE	TITLE
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		DATE	DATE	OUTLINE
TOLERANCES:		DATE	DATE	SIZE
ANGLES = 3°		DATE	DATE	CAGE CODE
3 PL ± .010 [25]		DATE	DATE	DWG NO
2 PL ± .015 [38]		DATE	DATE	REV
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		DATE	DATE	B
CONCENTRICITY FRACTURED DIA. .002 FPM		DATE	DATE	28812
MACHINE TOOL MISMATCH .003 MAX		DATE	DATE	21360-500
NEXT ASSY	USED ON	SCALE	3:1	SHEET 1 OF 1
APPLICATION	THIRD ANGLE PROJECTION			

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