

**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: 100 W CW  
 Insertion Loss: 0.55 dB Max.  
 VSWR: 1.40:1 Max.  
 Phase Balance:  $\pm 5^\circ$  dB Max.  
 Amplitude Balance:  $\pm 0.6$  dB Max.  
 Isolation: 16 dB Min.

**Mechanical Specifications:**

Type: Surface Mount  
 Plating Options: QH10756-Ag: Immersion Silver (RoHS)  
 Size: 0.744 x 0.450 x 0.093"

**Port Configurations:**

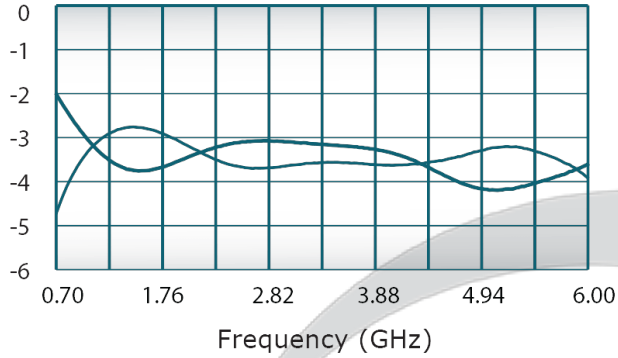
<b>J1</b>	<b>J2</b>	<b>J3</b>	<b>J4</b>
Input	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Input

**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.

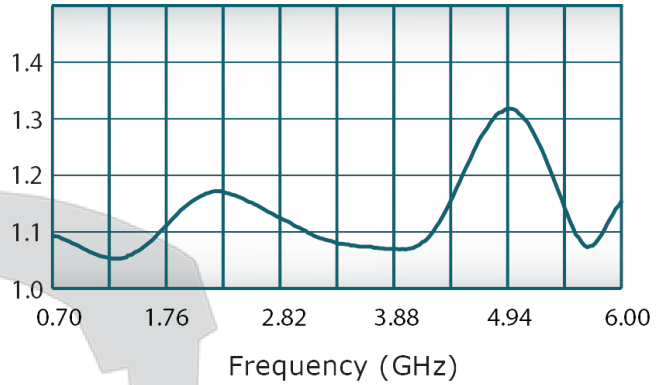


## Performance Data (Specifications subject to change without notice):

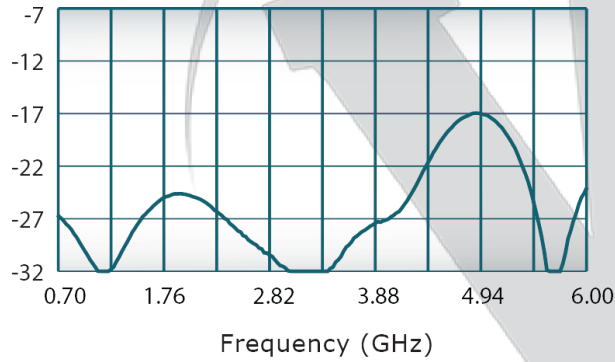
Coupling:



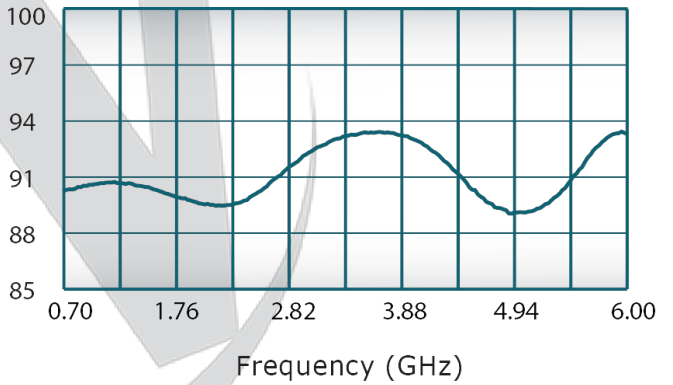
VSWR:



Isolation:



Phase Balance:



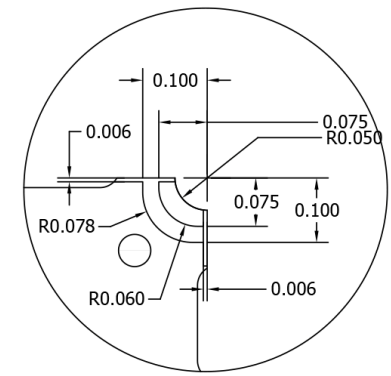
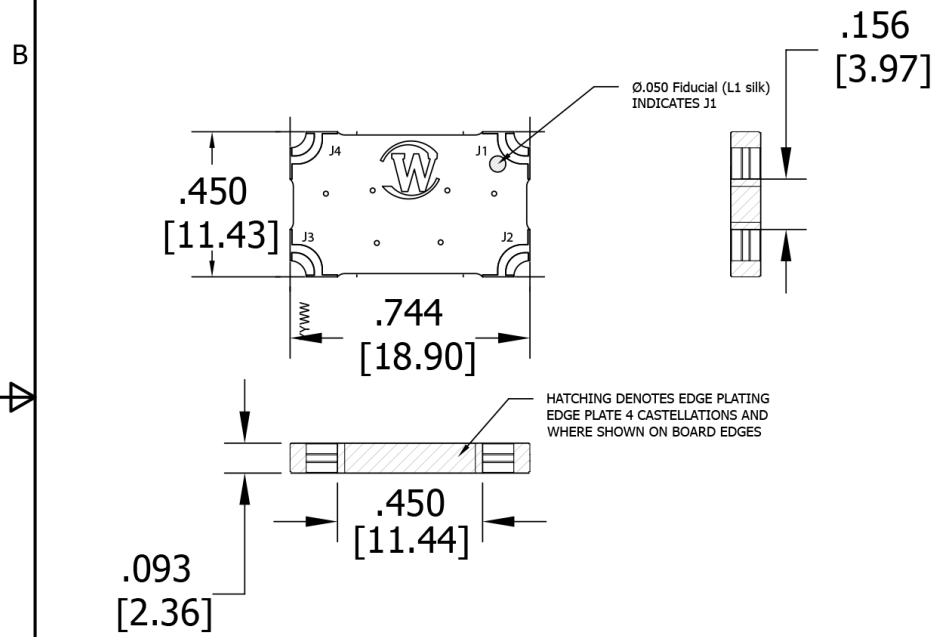
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Werlatone, Inc.

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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	Preliminary		
A	ECN9141	8/11/2016	MB
B	ECN9512	2/12/2018	CS
C	ECN9573	5/10/2018	CS



<small>UNLESS OTHERWISE SPECIFIED</small> • INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHESES ARE IN INCHES [mm] • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° 3 PL ± .010 [.25] 2 PL ± .015 [.4]	DWN	DATE	<b>WERLATONE   SINCE 1965</b>	17 Jon Barrett Rd Patterson, NY 12563	
	MB	5/25/16			
	CHK	DATE	TITLE		
	ENGR	DATE	SCALE		
MB	5/25/16	SIZE	CAGE CODE	DWG NO	
MFGR	DATE	A	28812	21441-500	
QA	DATE	SCALE	REV		
RLSE	DATE	2:1	C		
THIRD ANGLE PROJECTION		SHEET 1 OF 1			

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