

**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:                      600 - 4000 MHz  
 Power:                              150 W CW  
 Insertion Loss                0.5 dB Max.  
 VSWR:                              1.40:1 Max.  
 Phase Balance:                ± 5° dB Max.  
 Amplitude Balance:        ± 0.7 dB Max.  
 Isolation:                        17 dB Min.

**Mechanical Specifications:**

Type:                                      Surface Mount  
 Plating Options:                QH11113-Ag: Immersion Silver (RoHS)  
 Size:                                      1.29 x 0.99 x 0.12"

**Port Configurations:**

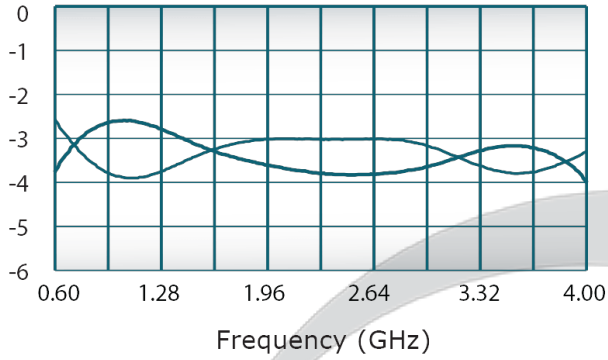
<b>J1</b>	<b>J2</b>	<b>J3</b>	<b>J4</b>
Sum	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Sum	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Sum	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Sum

**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.

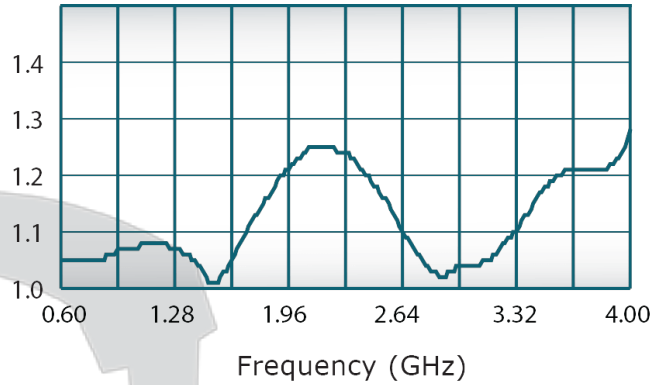


## Performance Data (Specifications subject to change without notice):

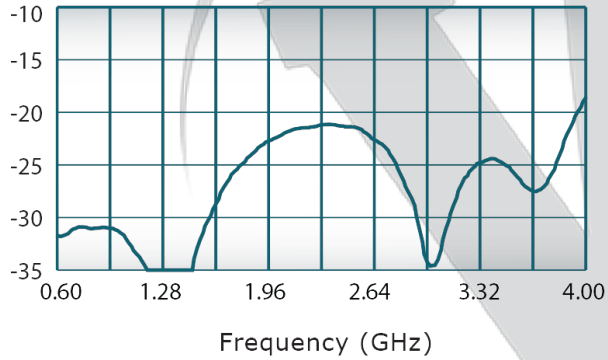
Coupling:



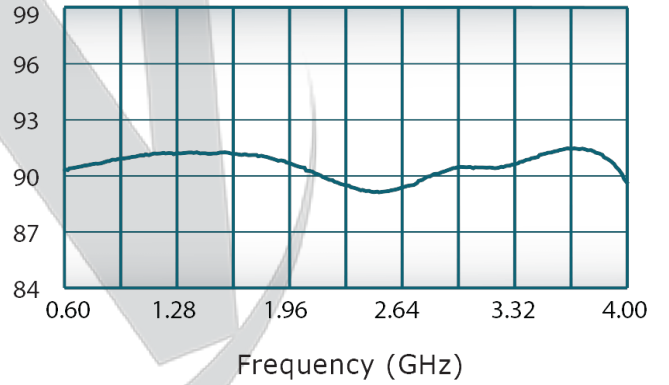
VSWR:



Isolation:



Phase Balance:



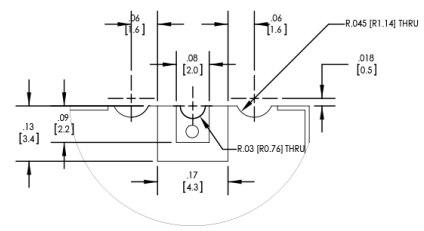
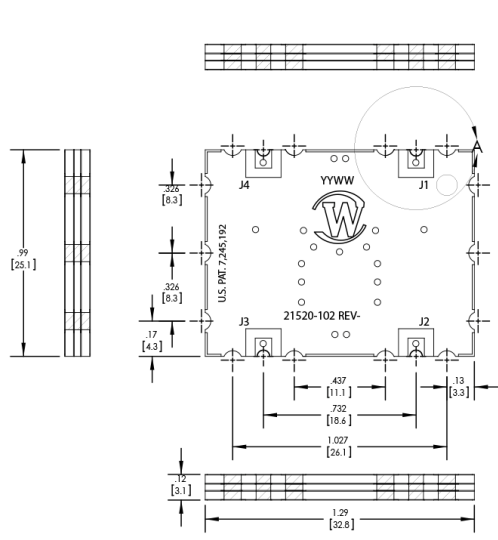
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Werlatone, Inc.

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

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	8/22/2017	



DETAIL A  
SCALE 4 : 1



**NOTES: UNLESS OTHERWISE SPECIFIED**

1. SMT
2. SURFACE FINISH: Immersion Silver (RoHS Compliant)
3. OTHER SURFACE FINISHES AVAILABLE UPON REQUEST
4. HATCHED AREAS DENOTE METALLIZATION

UNLESS OTHERWISE SPECIFIED		OWN	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
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NEXT ASSY USED ON		CHK	DATE	TITLE
APPLICATION		ENGR	DATE	OUTLINE
		MB	5/16/2017	SIZE CAGE CODE DWG NO
		QA	DATE	B 28812 21520-500
		REL	DATE	SCALE 1:1
				REV -
				SHEET 1 OF 1

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