

**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: 2 - 30 MHz  
 Power: 80 W CW  
 Insertion Loss: 0.5 dB Max.  
 VSWR: 1.30:1 Max.  
 Phase Balance: 90° ± 5° Max.  
 Amplitude Balance: ± 0.2 dB Max.  
 Isolation: 20 dB Min.

**Mechanical Specifications:**

Type: Connectorized  
 Material: Aluminum 6061-T6  
 Surface Finish: Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite) RoHS Compliant Available  
 Operating Temperature: -55°C to +75°C  
 Storage Temperature: -60°C to +85°C  
 Size: 4.0 x 4.0 x 2.25"

**Connector Configurations:**

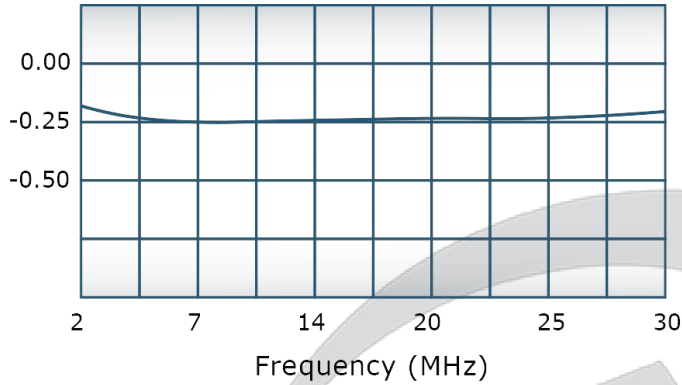
Model	Sum Port (J1)	90°, 0° (J2,J3)	Difference Port (J4)
QH10350-10	N Female	N Female	N Female

**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.

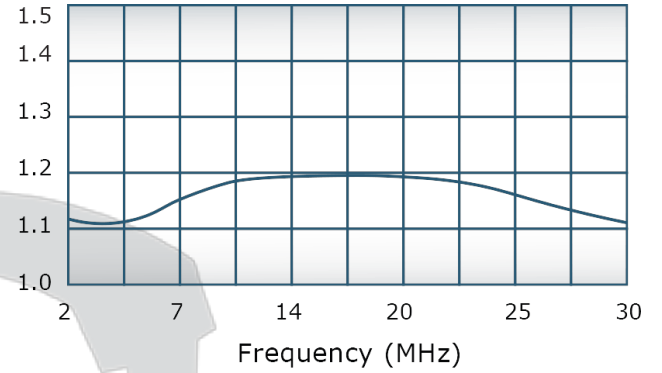


## Performance Data (Specifications subject to change without notice):

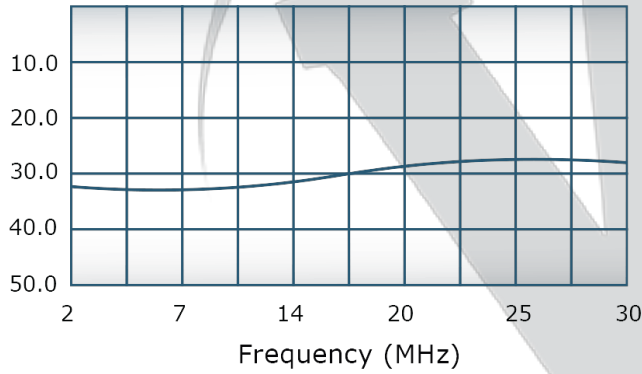
Insertion Loss:



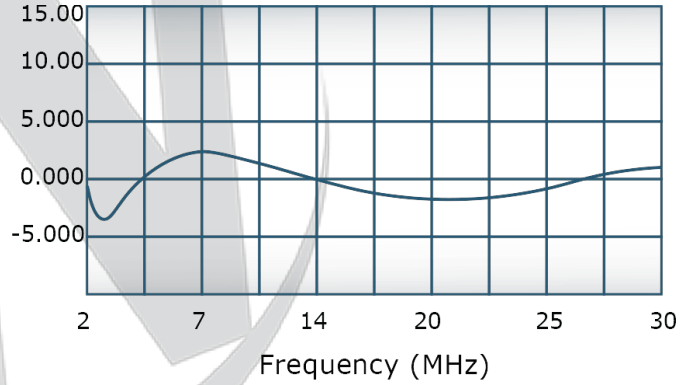
VSWR:



Isolation:

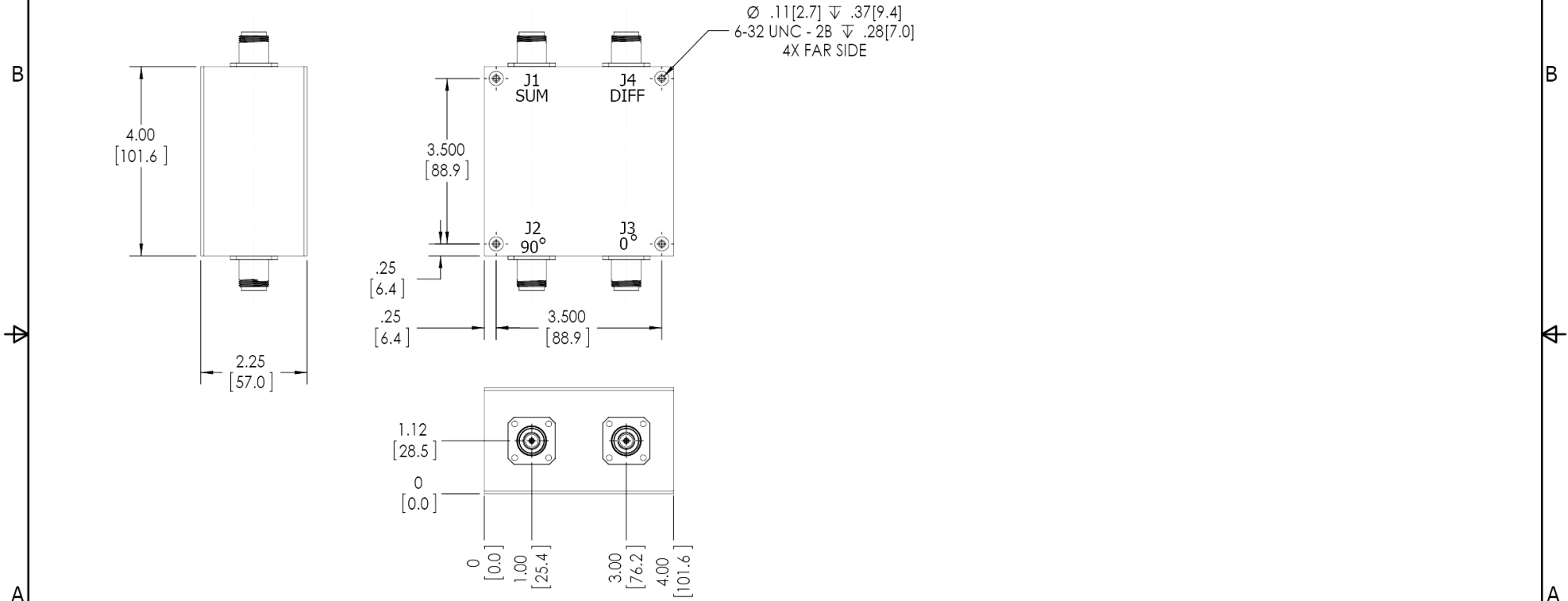


Phase Balance:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/21/2018	CS
A	ECN#9937	5/21/20	PR



**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM**
- SURFACE FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS: J1- J4 N (FEMALE)**

UNLESS OTHERWISE SPECIFIED		PLP	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHEICAL INFO FOR REF ONLY DIMENSIONS ARE IN INCHES (mm) DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		CHK	DATE	
		ENGR	DATE	TITLE
		MFR	DATE	<b>OUTLINE</b>
		QA	DATE	SIZE CAGE CODE DWG NO
		RLSE	DATE	B 28812 21588-500
APPLICATION		THIRD ANGLE PROJECTION		SCALE 1:2
NEXT ASSY USED ON		QH10350		REV A
				SHEET 1 OF 1

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