

PRODUCT DATA SHEET

QH10350

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

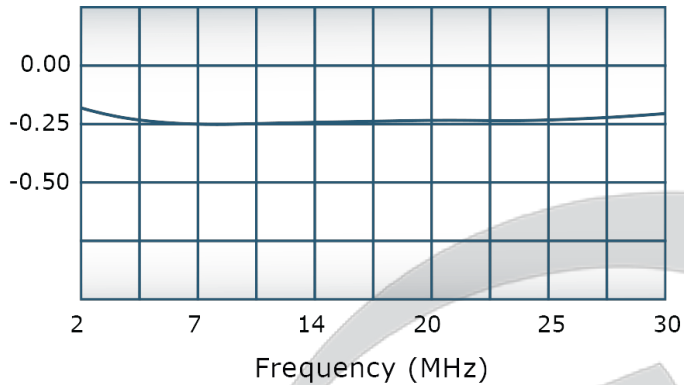


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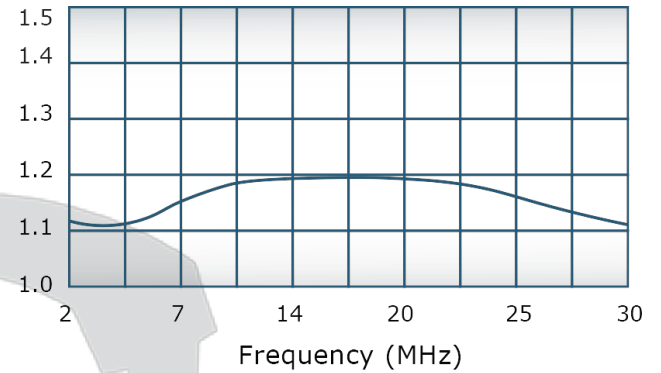
QH10350

Performance Data (Specifications subject to change without notice):

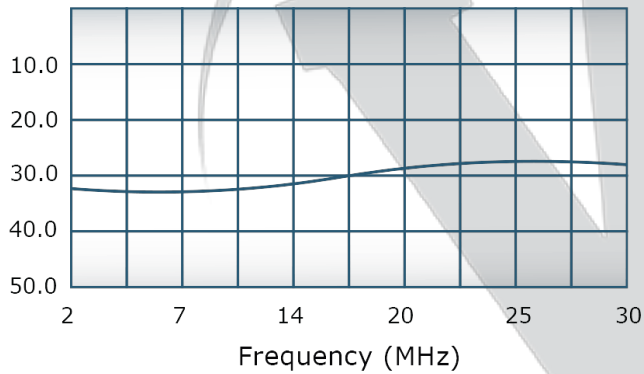
Insertion Loss:



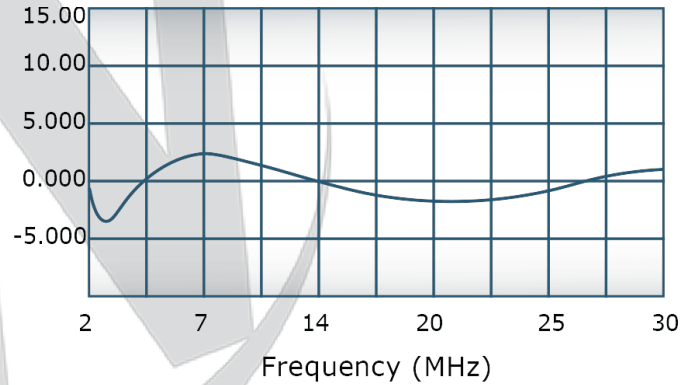
VSWR:



Isolation:



Phase Balance:

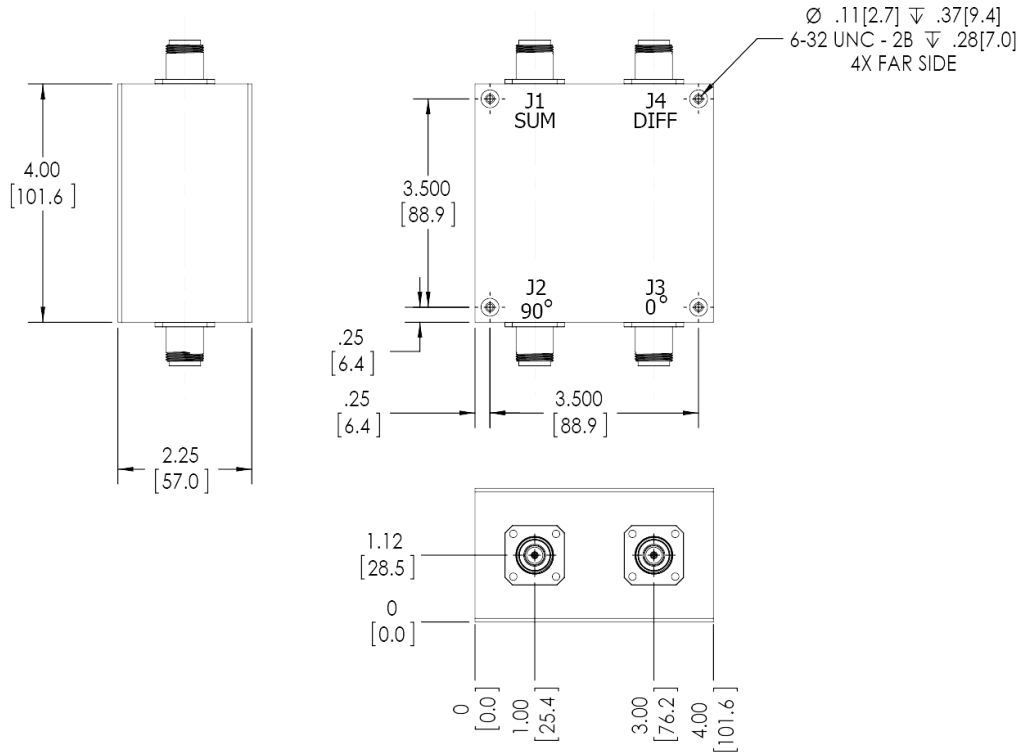


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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/21/2018	CS
A	ECN#9937	5/21/20	PR



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		OWN	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100	PLP	2/20/2018	DATE	
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE	DATE	
PARENTHESES FOR REFERENCE ONLY	CS	2/21/2018	DATE	
DIMENSIONS ARE IN INCHES (mm)	ENGR	DATE	DATE	OUTLINE SIZE CAGE CODE DWG NO B 28812 21588-500
DIMENSIONAL LIMITS APPLY UNLESS OTHERWISE SPECIFIED	INPR	DATE	DATE	
TOLERANCES:	QA	DATE	DATE	
ANGLES ± 2°	RLSE	DATE	DATE	
3 PL ± .005 [13]	APPLICATION		THIRD ANGLE PROJECTION	REV
2 PL ± .015 [4]	NEXT ASSY		USED ON	A
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	SCALE		1:2	SHEET 1 OF 1
CIRCULARITY MACHINED DIA. .002 FIM	DATE		DATE	
MACHINE TOOL MISMATCH .003 MAX	DATE		DATE	

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