WERLATONE

Model QH9103
90° Hybrids Connectorized

PRODUCT DATA SHEET **QH9103**

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:	80 - 1000 MHz
Power:	100 W CW
Insertion Loss:	1.0 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	90° ± 5° Max.
Amplitude Balance:	± 1.0 dB Max.
Isolation:	16 dB Min.

Mechanical Specifications:

Type:	Connectorized
Material:	Aluminum 6061-T6
Surface Finish:	Chem. Film Per MIL-DTL-5541F Type II Class 3 (Clear Iridite) RoHS Compliant Available
Operating Temperature:	-55°C to +75°C
Storage Temperature:	-60°C to +85°C
Weight:	5.65 oz.
Size:	3.1 x 1.7 x 0.84''

Connector Configurations:

Model	**Sum Port (J1)**	**0°, +90° (J2,J3)**	**ISO Port (J4)**
QH9103-102	SMA	SMA	SMA

"QH9103R-102" indicates a RoHS Compliant design.

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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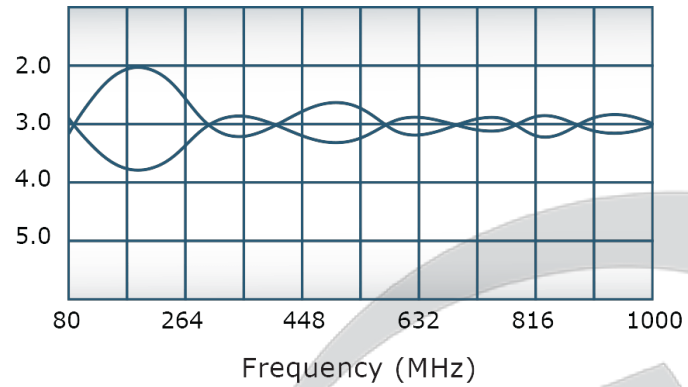
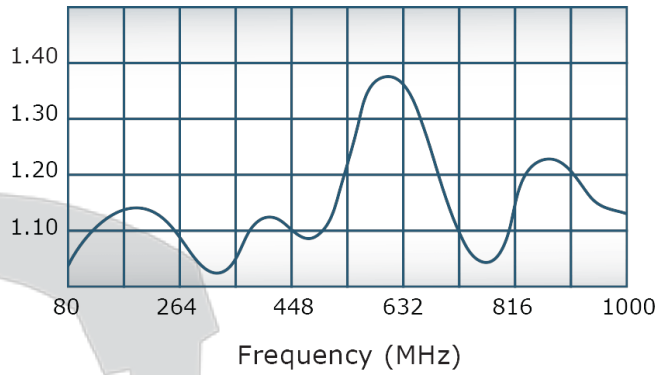
Performance Data (Specifications subject to change without notice):

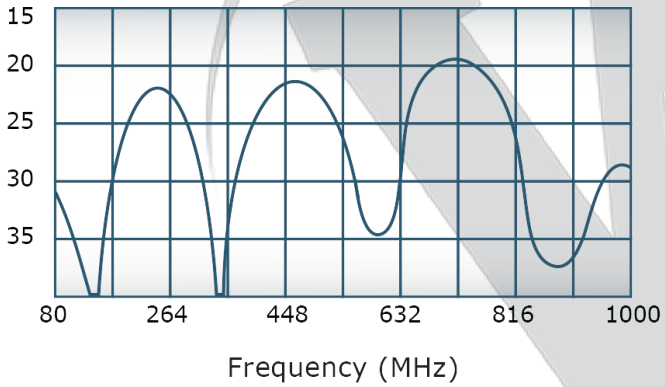
Coupling:



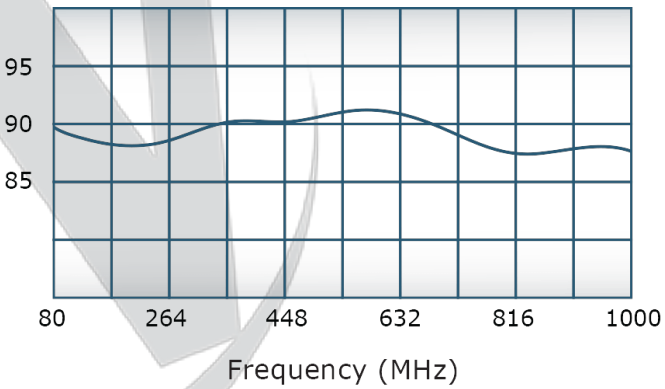
VSWR:



Isolation:



Phase Balance:



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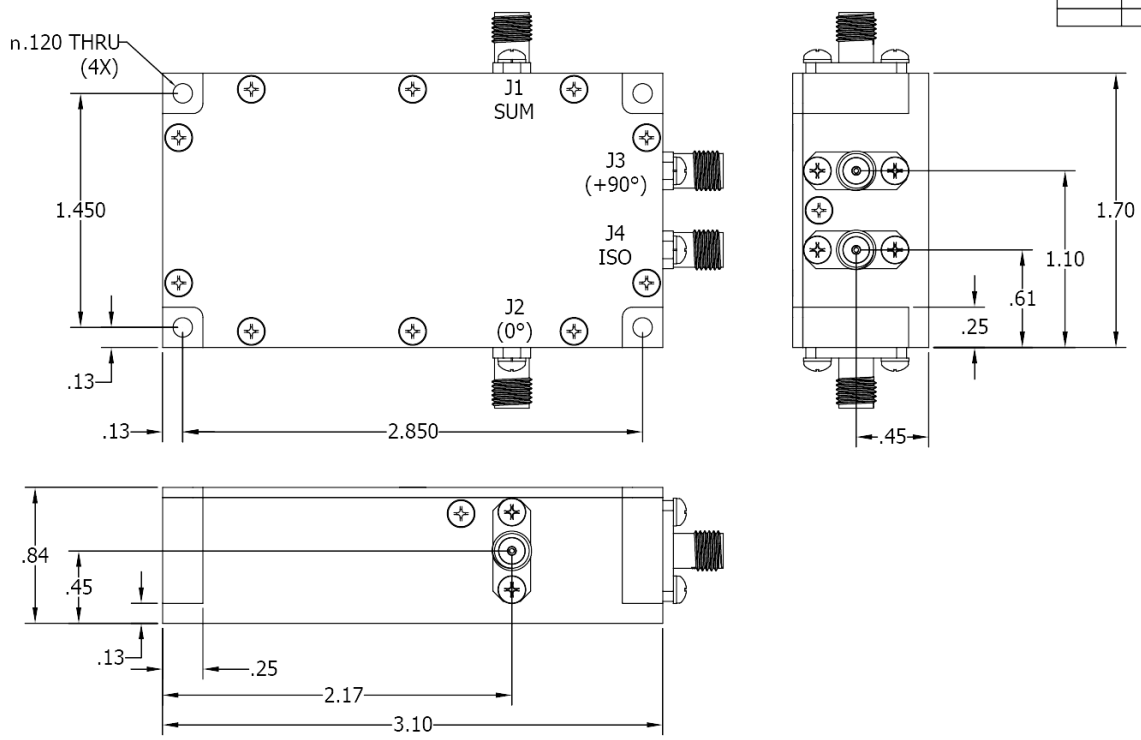
REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RLS	8/23/2011	BW
A	ECN 10037	5/11/2021	BW



NOTES:

1. MAT'L: ALUMINUM 6061-T6
2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE 1 CLASS 3 (YELLOW IRIDITE)
3. CONNECTORS: ALL SMA (Female)

	QH9103
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
- INTERPRET DRAWING IAW MIL-STD-100
- DIMENSIONING PER ASME Y14.5M-2009
- PARENTHETICAL INFO FOR REF ONLY
- DIMENSIONS ARE IN INCHES
- DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
- TOLERANCES: ANGLES ± 2°, .XXX ± .005, .XX ± .015
- HOLE TOLERANCES +.004/-.001
- REMOVE ALL BURRS AND SHARP EDGES R.01 MAX
- CONCENTRICITY MACHINED DIA: .002 FIM
- MACHINE TOOL MISMATCH .003 MAX

THIRD ANGLE PROJECTION

DWN	NH	DATE 8/23/2011
CHK	BW	DATE 8/23/2011
ENGR	BW	DATE 8/23/2011
MFGR		DATE
QA		DATE
RLSE		DATE

WERLATONE | SINCE 1965
17 Jon Barrett Rd
Patterson, NY 12563

TITLE
OUTLINE

SIZE	CAGE CODE	DWG NO	REV
A	28812	20796-500	A

SCALE | SHEET 1 OF 1

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