


PRODUCT DATA SHEET
QH10319
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:	500 - 2800 MHz
Power:	350 W CW
Insertion Loss:	0.45 dB Max.
VSWR:	1.35:1 Max.
Phase Balance:	90° ± 5° Max.
Amplitude Balance:	± 0.6 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:	2.91 x 2.29 x 1.15"

Connector Configurations:

Model	Sum Port (J1)	0°,90° (J2,J3)	Iso. Load Port (J4)
QH10319-10	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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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

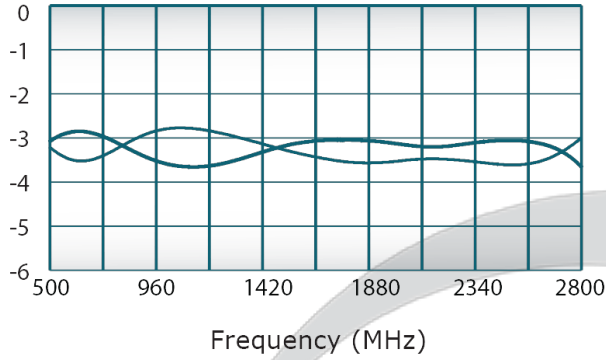


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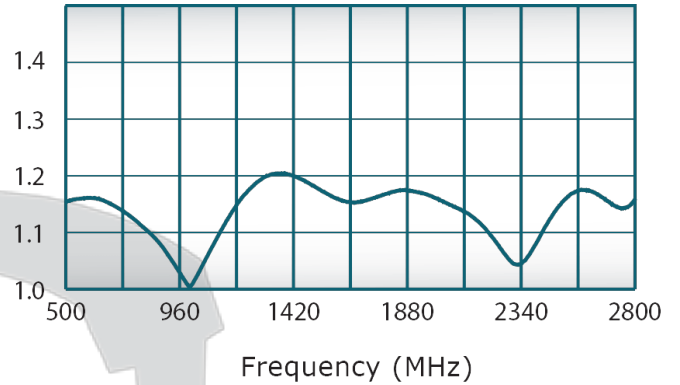
QH10319

Performance Data (Specifications subject to change without notice):

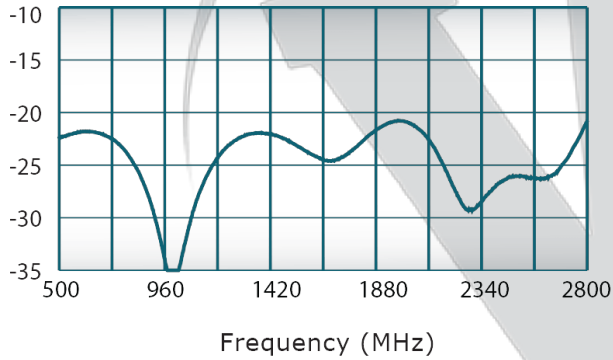
Coupling:



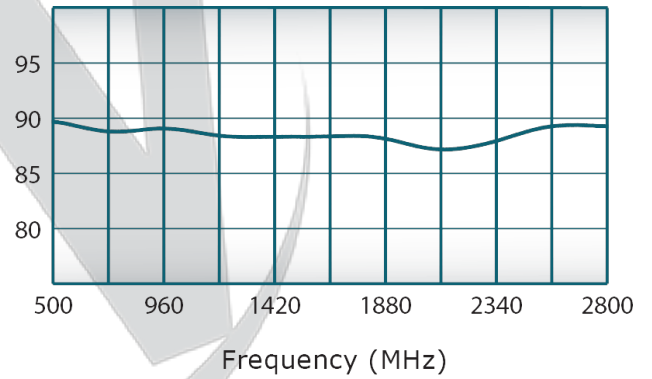
VSWR:



Isolation:



Phase Balance:



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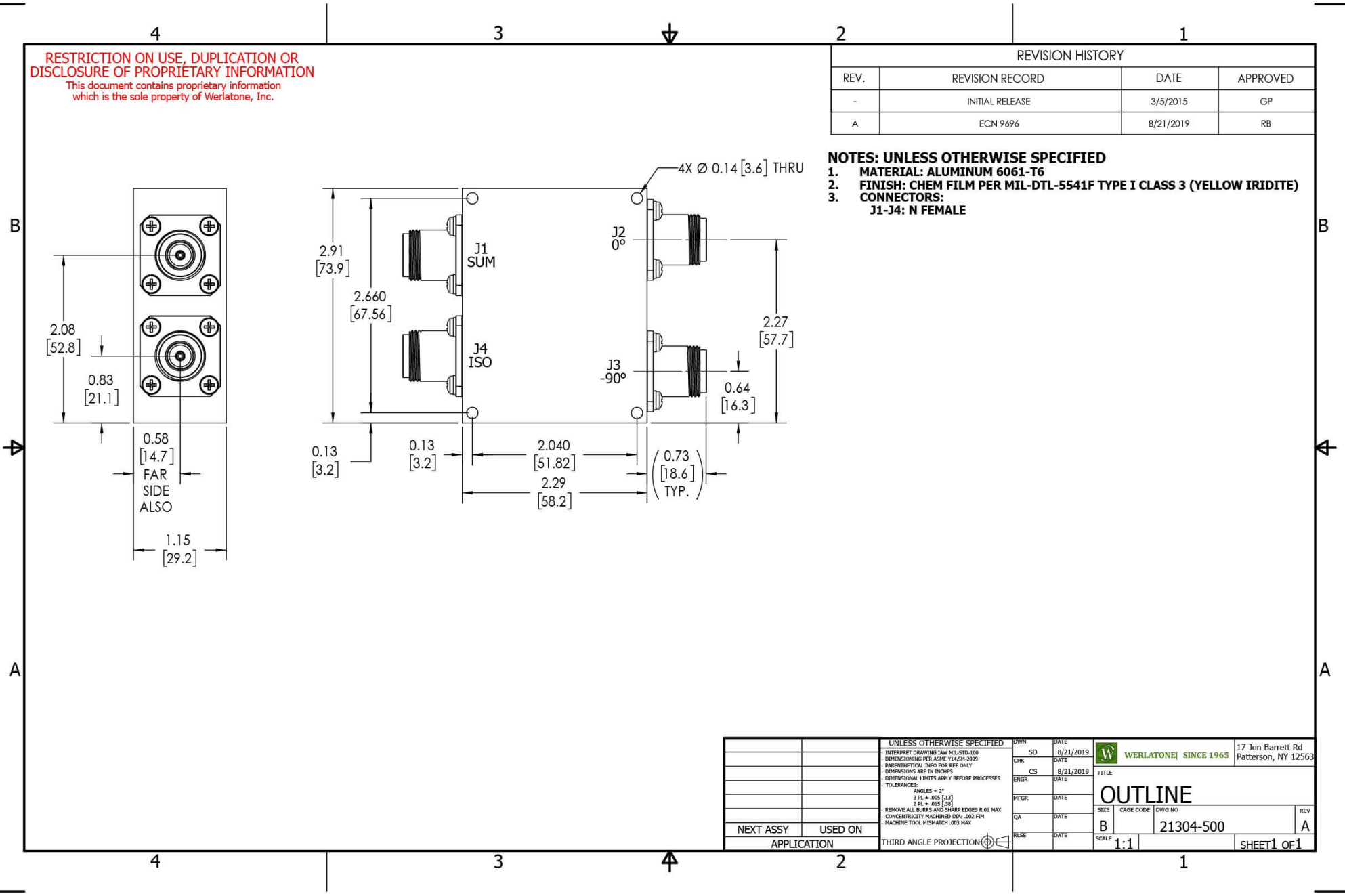
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	3/5/2015	GP
A	ECN 9696	8/21/2019	RB

NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:
J1-J4: N FEMALE**



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	8/21/2019	W WERLATONE SINCE 1965
DIMENSIONS FOR ASSEMBLY PER MIL-STD-100		CHK	DATE	
PARENTHESES FOR REFERENCE ONLY		CS	8/21/2019	TITLE
DIMENSIONS ARE IN INCHES		ENGR	DATE	OUTLINE
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	SIZE CAGE CODE DWG NO
TOLERANCES:		QA	DATE	B 21304-500
ANGLES ± 2°		RLSE	DATE	SCALE 1:1
3 PL ± .005 (1.3)		REV A		
2 PL ± .015 (3.8)		SHEET 1 OF 1		
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		APPLICATION		
CONCENTRICITY MACHINED DIA: .002 FIM		THIRD ANGLE PROJECTION		
MACHINE TOOL MISMATCH .003 MAX.				

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