
PRODUCT DATA SHEET
QH10828
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:	1000 - 8000 MHz
Power:	100 W CW
Insertion Loss	0.9 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	± 5° dB Max.
Amplitude Balance:	± 0.7 dB Max. (1200-8000 MHz) ± 1.5 dB Max. (1000-1200 MHz)
Isolation:	17 dB Min.

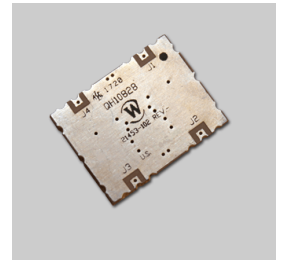
Mechanical Specifications:

Type:	Surface Mount
Plating Options:	QH10828-Pb: Electrodeposited Tin/Lead QH10828-Sn: Immersion Tin (RoHS Compliant) QH10828-Ag: Immersion Silver (RoHS Compliant)
Size:	0.65 x 0.5 x 0.07"

Port Configurations:

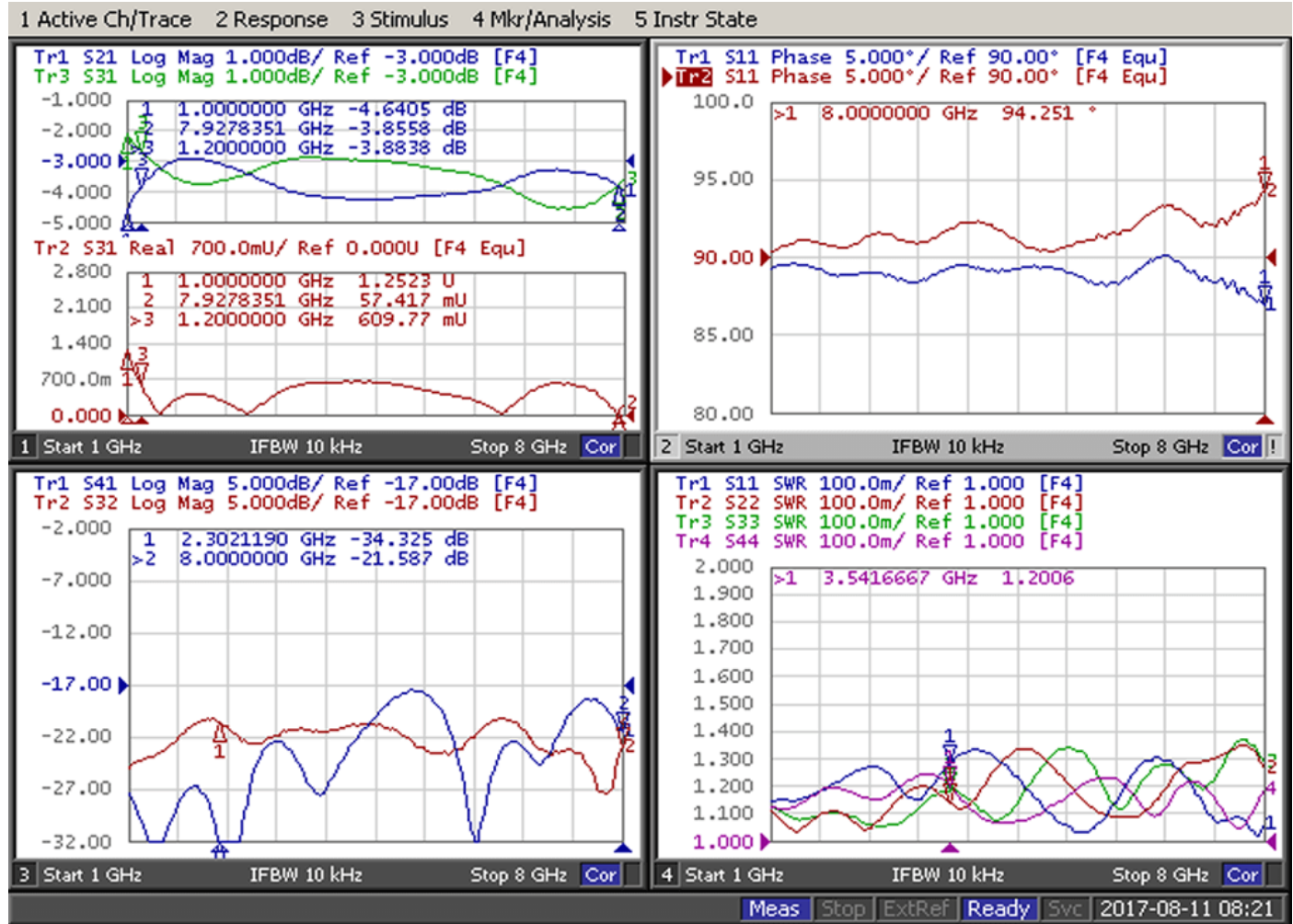
J1	J2	J3	J4
Input	3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Input

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.



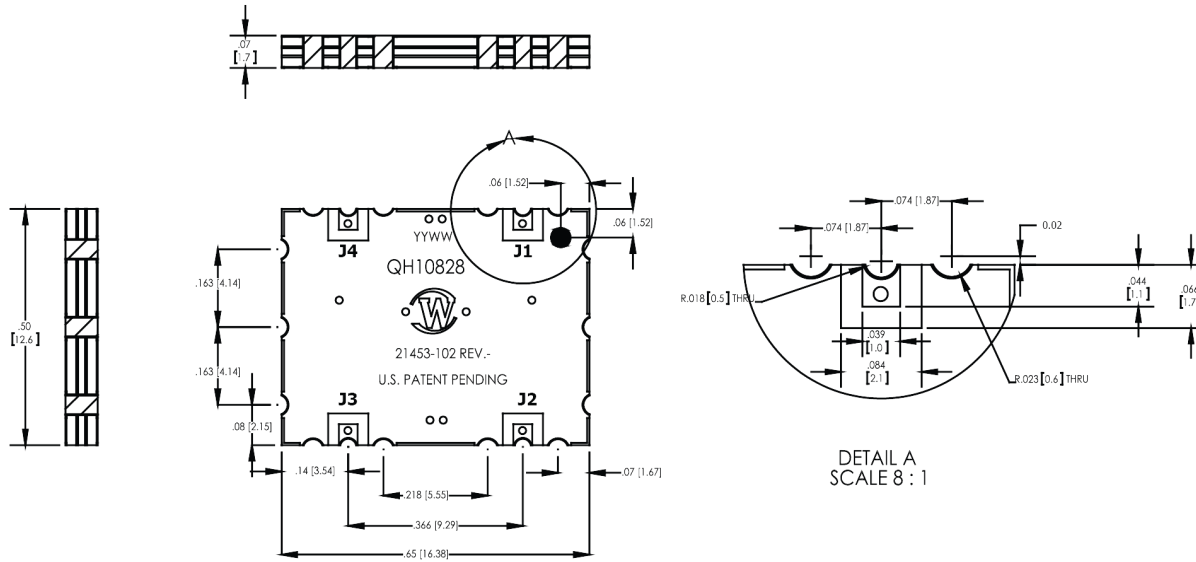
Performance Data (Specifications subject to change without notice):

Plot 1: Coupling & Insertion Loss, Plot 2: Phase Balance, Plot 3: Isolation, Plot 4: VSWR



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	PRE-RELEASE	2/1/2017	CS
A	ECN9328	6/1/2017	CS



Port Configurations			
J1	J2	J3	J4
Input	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Input

NOTES: UNLESS OTHERWISE SPECIFIED

- SURFACE MOUNT UNIT**
- SURFACE FINISH: IMMERSION SILVER (RoHS Compliant). OTHER SURFACE FINISHES AVAILABLE UPON REQUEST.**
- SEE SURFACE MOUNT TECH NOTE FOR INSTALLATION GUIDELINES.**

UNLESS OTHERWISE SPECIFIED		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
<ul style="list-style-type: none"> • INTERPRET DRAWING IAW MIL-STD-100 • DIMENSIONING PER ASME Y14.3M-2009 • PARENTHETICAL INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES (TRY) • DIMENSIONAL UNITS APPLY BEFORE PROCESSES • TOLERANCES: <ul style="list-style-type: none"> ANGLES ± 2° 3 PL ± .005 (1:3) 2 PL ± .015 (1:4) 		CHK	DATE	WERLATONE SINCE 1965	
NEXT ASSY USED ON		ENGR	DATE	TITLE	
APPLICATION		MFR	DATE	SIZE	CAGE CODE
THIRD ANGLE PROJECTION		QA	DATE	B	28812
		RLSE	DATE	DWG NO	21453-500
				SCALE	4:1
				REV	A
				SHEET 1 OF 1	

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