
PRODUCT DATA SHEET
QH11687
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 Excellent Amplitude Balance

Electrical Specifications:

Frequency:	500 - 6000 MHz
Power:	150 W CW
Insertion Loss	0.75 dB Max.
VSWR:	1.40:1 Max.
Phase Balance:	90° ± 5° dB Max.
Amplitude Balance:	± 1.5 dB Max.
Isolation:	17 dB Min.

Mechanical Specifications:

Type:	SMT
Plating Options:	QH11687-Ag: Immersion Silver (RoHS)
Size:	1.28 x 1.08 x 0.13"

Port Configurations:

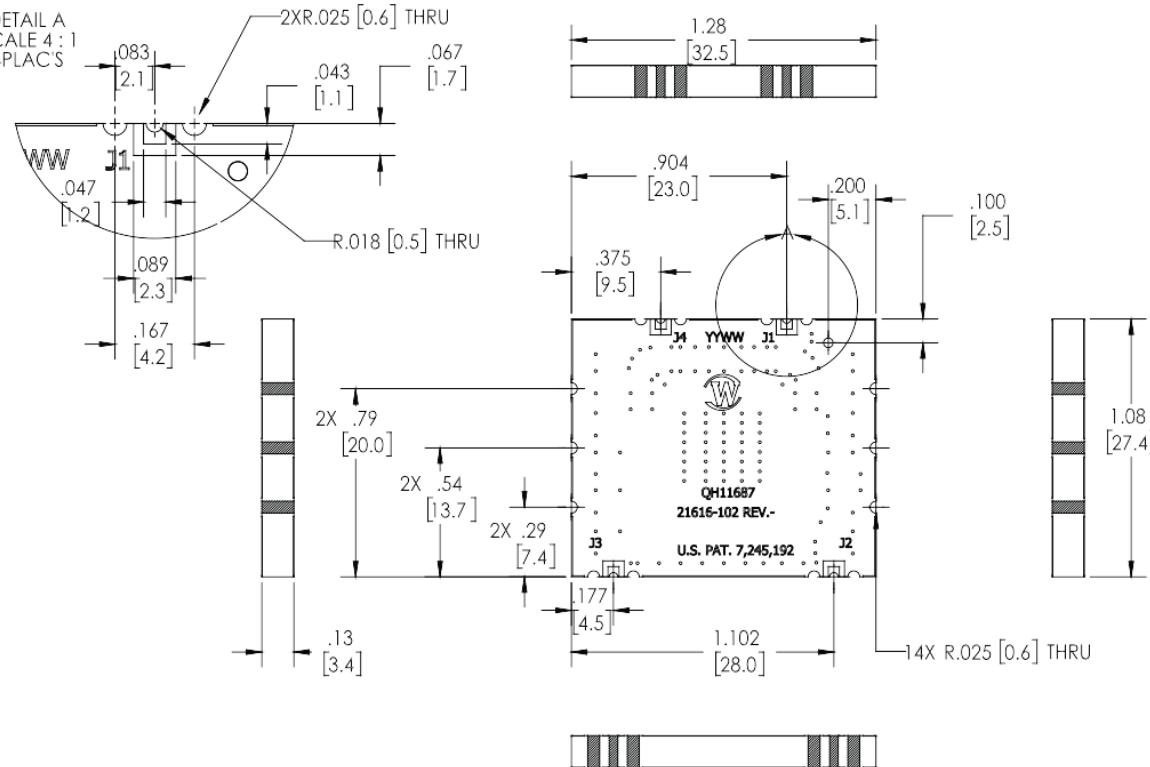
J1	J2	J3	J4
Input	-3 dB, 0°	-3 dB, -90°	Isolated
-3 dB, 0°	Input	Isolated	-3 dB, -90°
-3 dB, -90°	Isolated	Input	-3 dB, 0°
Isolated	-3 dB, -90°	-3 dB, 0°	Input

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.

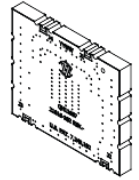
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DETAIL A
SCALE 4 : 1
4PLACS



REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	9/14/2018	CS
A	ECN9709	12/7/2018	CS
B	ECN9744	1/29/2019	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	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NV 12563
• INTERPRET DRAWING IAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M 2009 • PARENTHETICAL DIMS FOR REF ONLY • DIMENSIONS ARE IN INCHES (mm) • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° 3 PL ± .005 (1:1) 2 PL ± .013 (1:1) • REMOVE ALL BURRS AND SHARP EDGES & .01 MAX • CONCENTRICITY MACHINED DIA. AND FIN • MACHINE TOOL MARKING .003 MAX		MB	6/13/2018	
		CHK	DATE	TITLE OUTLINE SIZE CASE CODE DWG NO B 28812 21616-500
		GP	12/7/2018	
		ENGR	DATE	REV B
		MB	6/13/2018	
		DRGR	DATE	SCALE 2:1
		QA	DATE	
		RELSE	DATE	SHEET 1 OF 1
APPLICATION		THIRD ANGLE PROJECTION		

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