



PRODUCT DATA SHEET

H5817

Werlatone® High Power 180° RF Hybrid Combiners/Dividers balance traditional technologies with disruptive microwave techniques. The outcome is a microwave component which provides an order of magnitude improvement over current capabilities. Our newest line of high power, patented 180° RF Hybrid Combiners/Dividers provides an incredible 5:1 bandwidth, while exhibiting exceptionally low loss and superior port-to-port isolation.

Features:

High Power Wide Bandwidths Small Size Excellent Amplitude Balance

Electrical Specifications:

Frequency: 470 - 860 MHz
Power: 1200 W CW
Insertion Loss: 0.2 dB Max.
VSWR: 1.50:1 Max.
Phase Balance: $180^\circ \pm 3^\circ$ Max.
Amplitude Balance: ± 0.1 dB Max.
Isolation: 18 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: 2.0 x 5.0 x 1.88"

Connector Configurations:

Model	Sum Port (J1)	Inputs/Outputs (J2,J3)	Isolated Load Port (J4)
H5817-10	N Female	N Female	N Female
H5817-12	N Female	SMA	SMA

Werlatone's standard line of High Power 180° RF Hybrid Combiners/Dividers covers multiple octaves within a microwave device. Low frequency 180° Hybrid Combiner/Dividers employ proprietary ferrite transmission line techniques, similar to our 0° Combiners/Dividers. Insertion loss in both sum and difference ports is minimal, allowing the hybrid to handle high power over its frequency range. Custom requirements are welcome.

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION

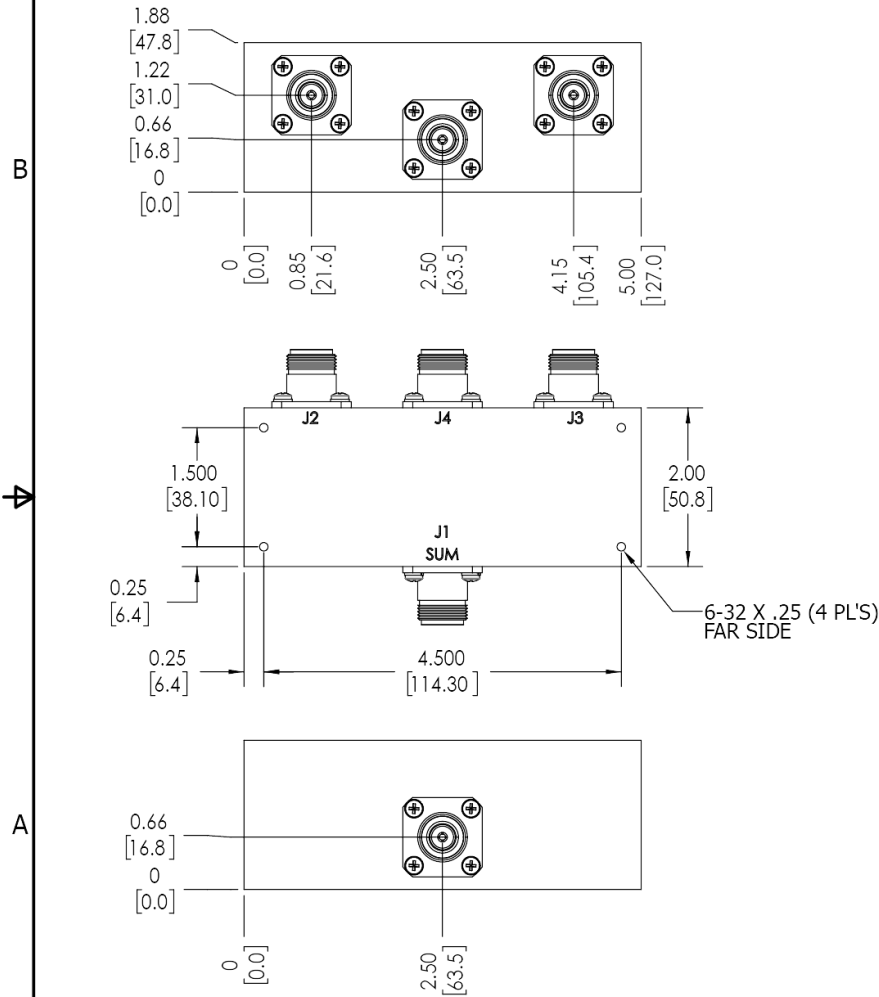
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REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/25/2019	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
J4: ISOLATED PORT (EXTERNAL LOAD REQUIRED)



		UNLESS OTHERWISE SPECIFIED		DWN	DATE	 WERLATONE SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	11/25/2019				
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE				
		PARENT/CHILD INFO FOR REF ONLY		CS	11/25/2019				
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES		MFR	DATE	TITLE OUTLINE			
		TOLERANCES:		QA	DATE				
		ANGLES ± 2°		DATE	DATE				
		3 PL ± .005 [13]		DATE	DATE				
		2 PL ± .015 [38]		DATE	DATE				
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		DATE	DATE	SIZE		CAGE CODE	DWG NO
		CONCENTRICITY MACHINED DIA. .002 FIM		DATE	DATE	B			10682-500
		MACHINE TOOL MISMATCH .003 MAX		DATE	DATE	SCALE		1.5	
NEXT ASSY		USED ON		DATE	DATE	SHEET		1	OF 1
APPLICATION		THIRD ANGLE PROJECTION							

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