



## 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° ± 3° 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.

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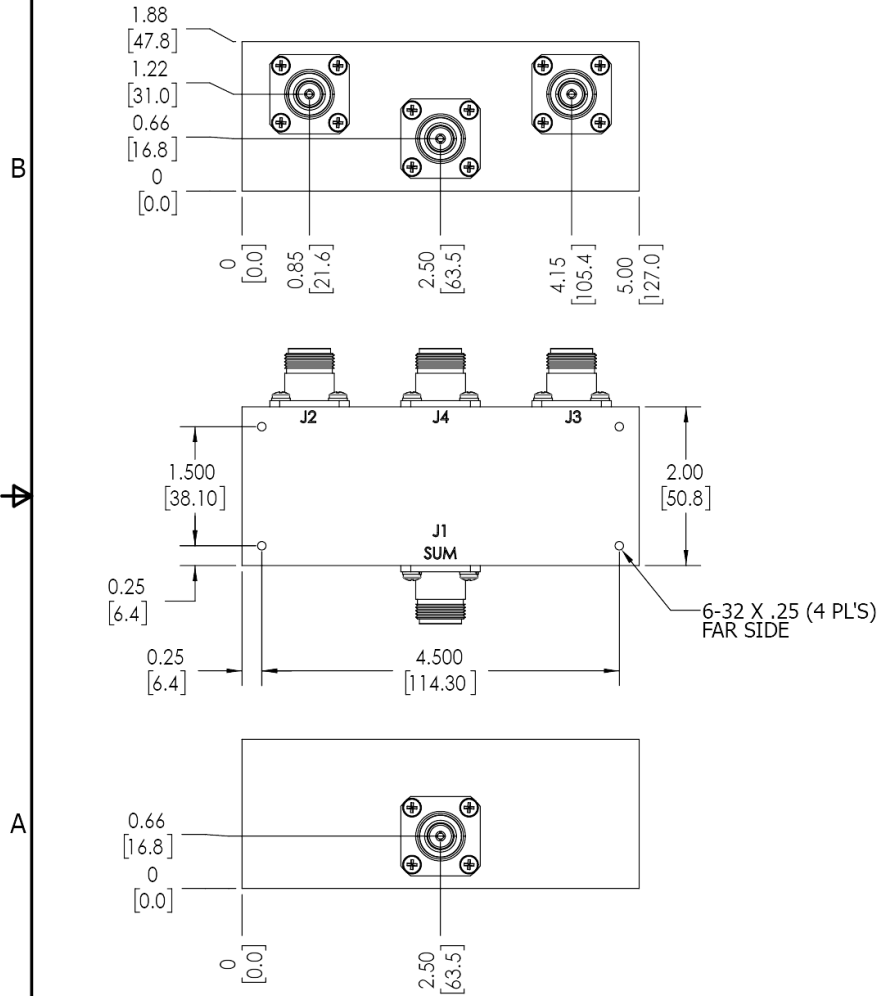
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/25/2019	RB

**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		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100	SD	11/25/2019		
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE		
PARENTHEetical INFO FOR REF ONLY	CS	11/25/2019	TITLE	
DIMENSIONS ARE IN INCHES	ENGR	DATE		
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE		
TOLERANCES:	QA	DATE		
ANGLES = 2°	RLSE	DATE		
3 PL ± .005 (.13)				
2 PL ± .015 (.38)				
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				
CONCENTRICITY MACHINED DIA: .002 FIM				
MACHINE TOOL MISMATCH .003 FIM				
NEXT ASSY	USED ON	SCALE	SIZE	REV
APPLICATION	THIRD ANGLE PROJECTION	1:1.5	B 10682-500	A
				SHEET 1 OF 1

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