



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:

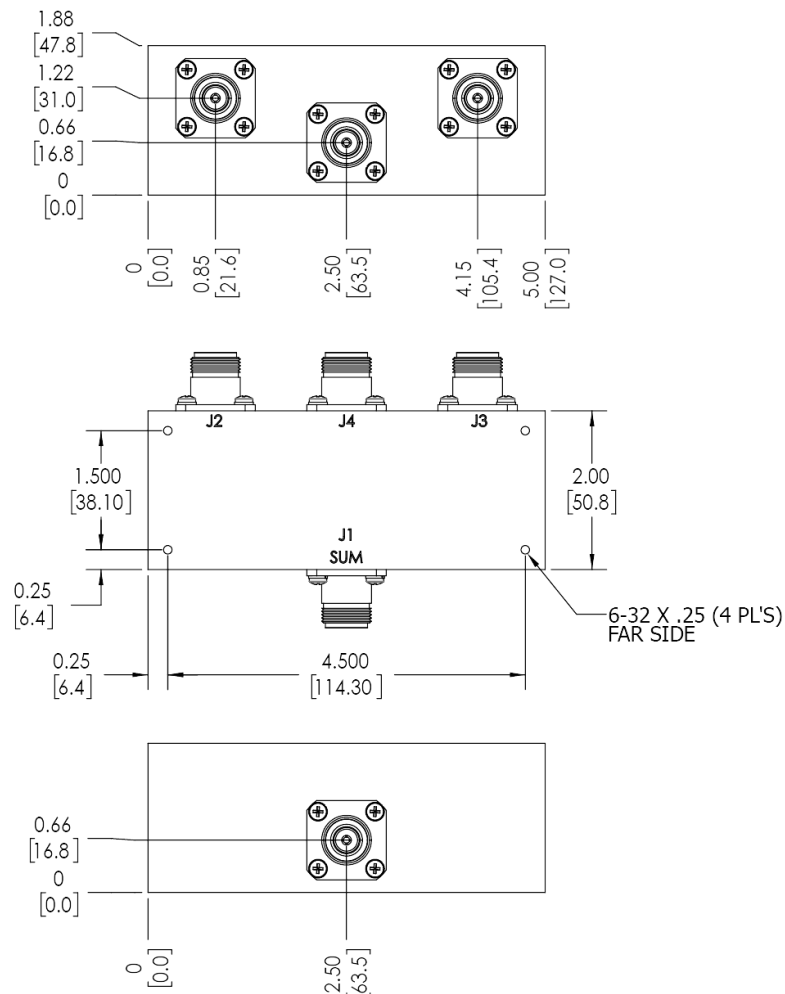
Model	Sum Port (J1)	Inputs/Outputs (J2,J3)	Isolated Load Port (J4)
H5817-10	N Female	N Female	N Female
H5817-12	N Female	SMA	SMA



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.

This document contains proprietary information
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REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/25/2019	RB

1. MATERIAL: ALUMINUM 6061-T6
2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)
3. CONNECTORS:
J1-J4: N FEMALE
J4: ISOLATED PORT (EXTERNAL LOAD REQUIRED)



UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12565
INTERPRET DRAWING IN ACC. W/ASME Y14.5-2009		SD	11/25/2019		
DIMENSIONS PER ASME Y14.5-2009		CHK	DATE		
DIMENSIONAL DATA FOR BEST FIT ONLY		CS	11/25/2019		
DIMENSIONS ARE IN INCHES		ENGR	DATE		
TOLERANCES:		MPGR	DATE	<div> <div>SIZE</div> <div>CAGE CODE</div> <div>DWG NO</div> </div> <div>10682-500</div>	
ANGLES = °		QA	DATE		
3 PL. = .005 (13)		RLSE	DATE		
2 PL. = .015 (30)					
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX					
CHINTEGRITY MACHINED DIA. - .002 FIM				<div> <div>SCALE</div> <div>1.5</div> </div> <div> <div>SHEET</div> <div>1 OF 1</div> </div>	
MACHINE TOOL DEFORMATION .001 MAX					
THIRD ANGLE PROJECTION 					
NEXT ASSY		USED ON			
APPLICATION					

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