

## PRODUCT DATA SHEET

H7815

**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: 30 - 512 MHz  
 Power: 20 W CW  
 Insertion Loss: 0.8 dB Max.  
 VSWR: 1.40:1 Max.  
 Phase Balance: 180° ± 5° Max.  
 Amplitude Balance: ± 0.3 dB Max.  
 Isolation: 20 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  
 Weight: 1.5 lbs.  
 Size: 4.0 x 2.2 x 1.1"

### Connector Configurations:

Model	Sum Port (J1)	0°, 180° (J2,J3)
H7815-10	N Female	N Female
H7815-12	N Female	SMA
H7815-13	N Female	BNC

**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.

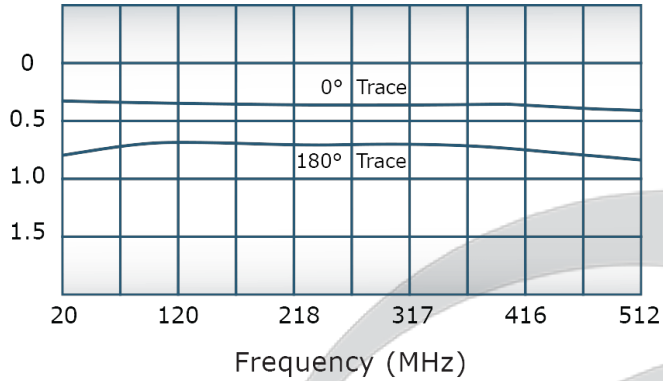


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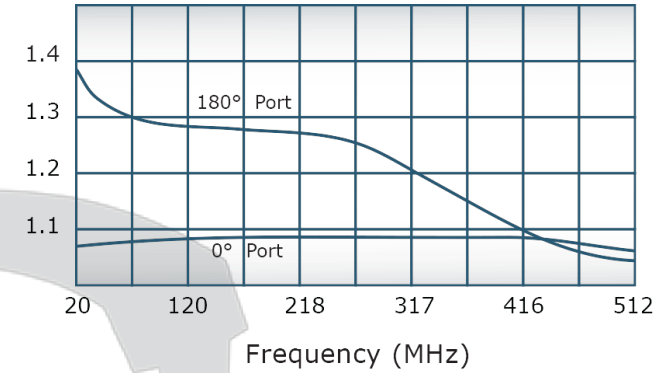
H7815

### Performance Data (Specifications subject to change without notice):

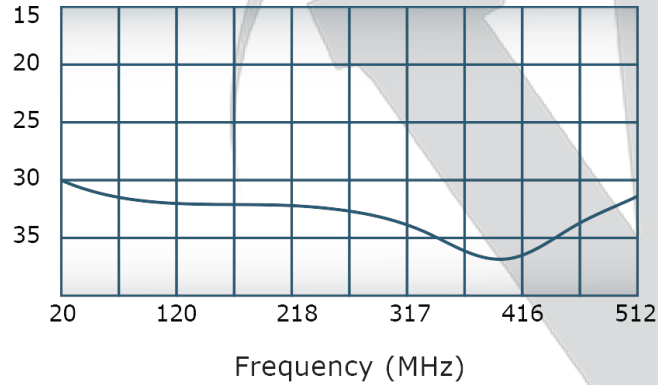
Insertion Loss:



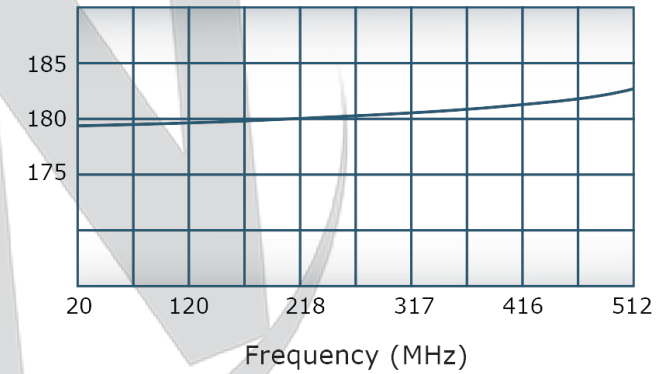
VSWR:



Isolation:



Phase Balance:

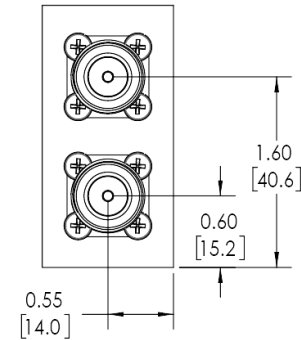
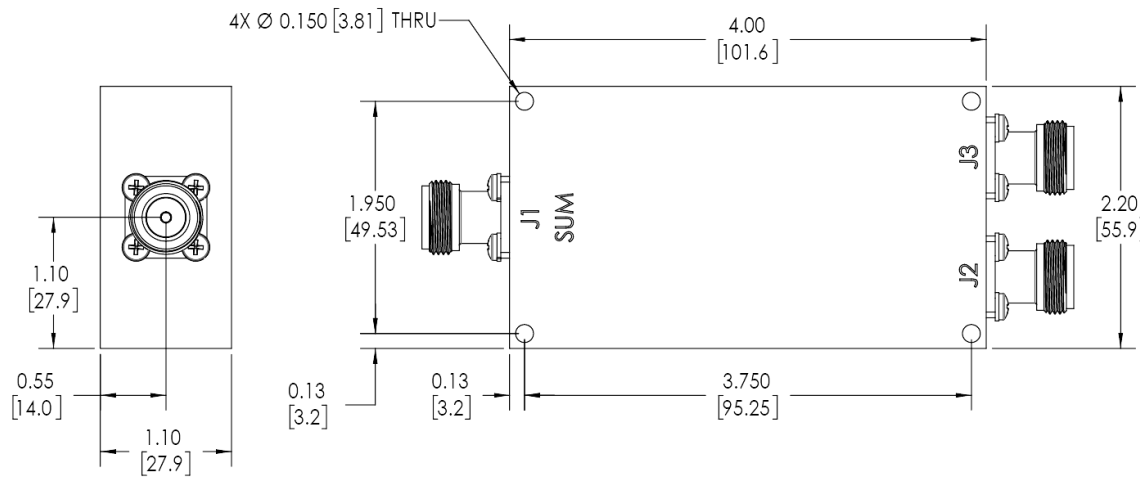



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	12/2/2019	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:  
J1-J3: N FEMALE**



		UNLESS OTHERWISE SPECIFIED		DWN	DATE	<div><div></div><div>WERLATONE   SINCE 1965</div></div> <div>17 Jon Barrett Rd Patterson, NY 12563</div>	
		SD	DATE	CHK	DATE		
		CS	DATE	ENGR	DATE		
		INPR	DATE	QA	DATE		
		RLSE	DATE	SCALE	DATE		
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100				<div>OUTLINE</div> <div>SIZE    CAGE CODE    DWG NO</div> <div>B    20215-500</div> <div>SCALE: 1:1</div> <div>SHEET 1 OF 1</div>	
		DIMENSIONS PER ASME Y14.5M-2009					
		PARENTHESES FOR REF ONLY					
		DIMENSIONS ARE IN INCHES					
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES					
		TOLERANCES:					
		ANGLES ± 2°					
		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					
		THIRD ANGLE PROJECTION					
NEXT ASSY		USED ON				REV	
APPLICATION						A	

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 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com