

PRODUCT DATA SHEET

H7814

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: 20 - 512 MHz
 Power: 50 W CW
 Insertion Loss: 0.8 dB Max.
 VSWR: 1.40:1 Max.
 Phase Balance: 180° ± 5° Max.
 Amplitude Balance: ± 0.4 dB Max.
 Isolation: 25 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: 4.0 x 2.2 x 1.1"

Connector Configurations:

Model	Sum Port (J1)	0°, 180° (J2,J3)
H7814-10	N Female	N Female
H7814-12	N Female	SMA
H7814-13	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.



WERLATONE

Model H7814

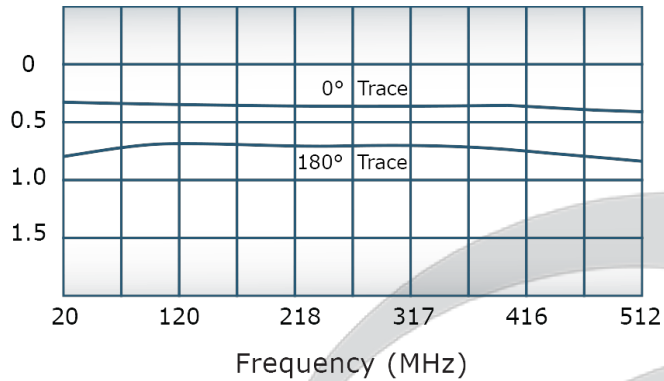


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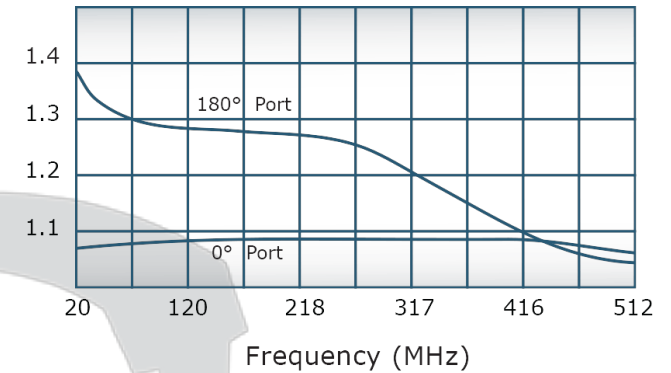
H7814

Performance Data (Specifications subject to change without notice):

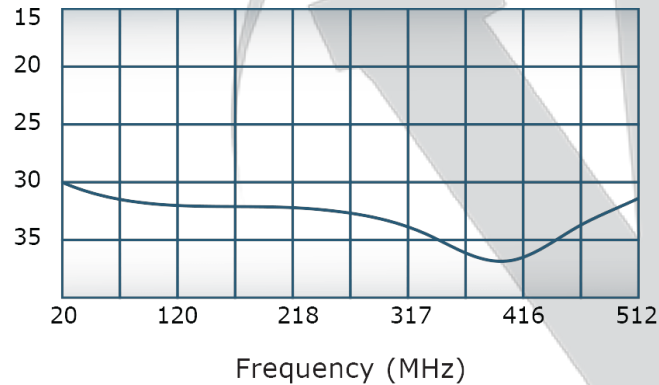
Insertion Loss:



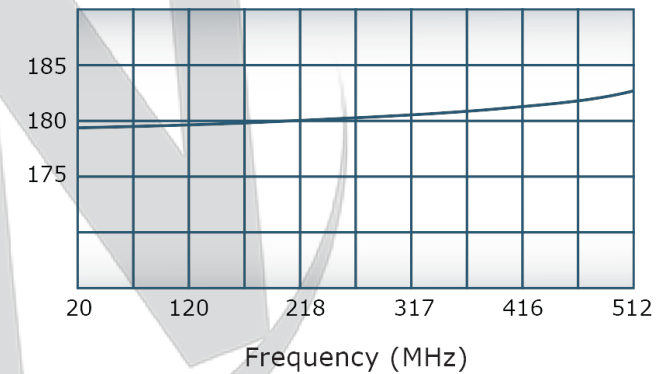
VSWR:



Isolation:



Phase Balance:



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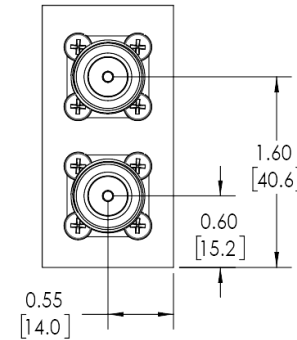
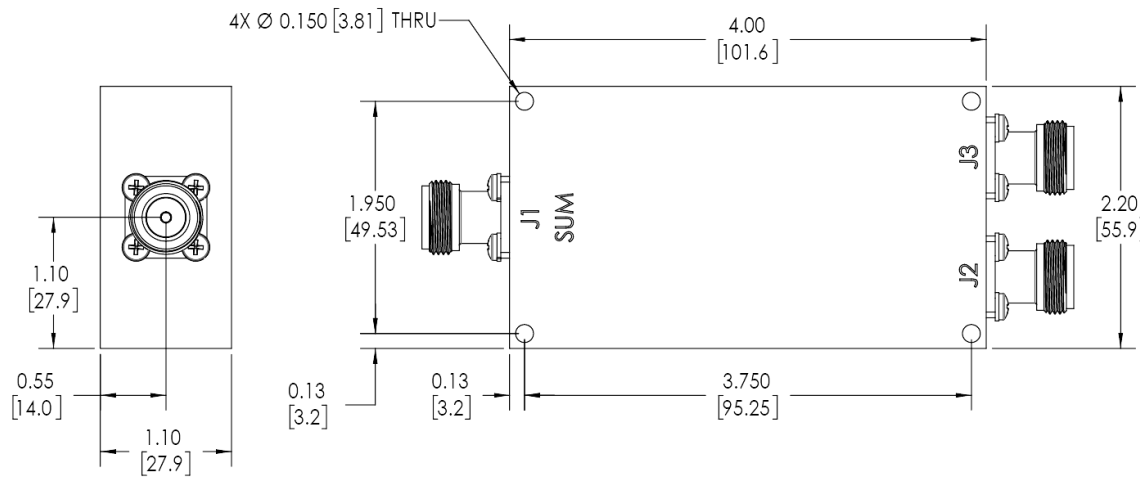
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



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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> WERLATONE SINCE 1965</div> <div>17 Jon Barrett Rd Patterson, NY 12563</div>	
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	12/2/2019		
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE		
		PARENTHESES FOR REF ONLY		CS	12/2/2019		
		DIMENSIONS ARE IN INCHES		ENGR	DATE		
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES				<div>TITLE</div> <div>OUTLINE</div> <div>SIZE CASE CHG DWS N°</div> <div>B 20215-500</div> <div>SCALE 1:1</div> <div>REV A</div>	
		TOLERANCES:					
		ANGLES ± 2°					
		3 PL ± .005 [13]		MGR	DATE		
		2 PL ± .015 [38]		QA	DATE		
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX					
		CONCENTRICITY MACHINED DIA. .002 FIM		RLSE	DATE		
		MACHINE TOOL MISMATCH .003 FIM					
NEXT ASSY		USED ON					
APPLICATION		THIRD ANGLE PROJECTION 		SHEET 1 OF 1			

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