

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
180° Hybrids Connectorized

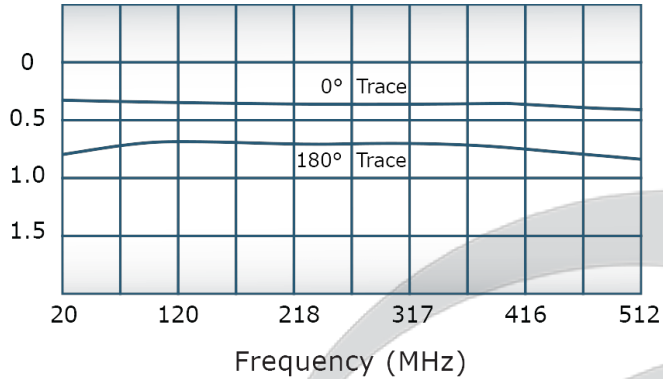


PRODUCT DATA SHEET

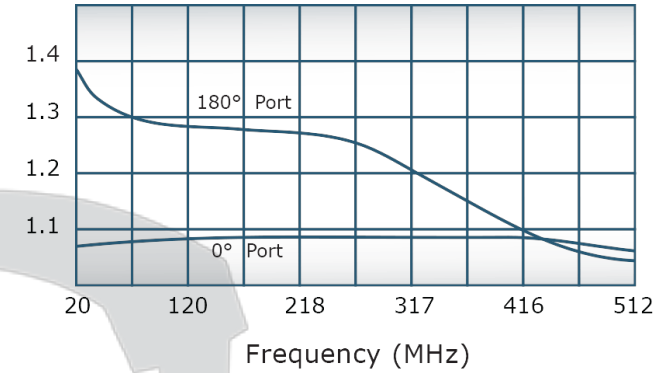
H7814

Performance Data (Specifications subject to change without notice):

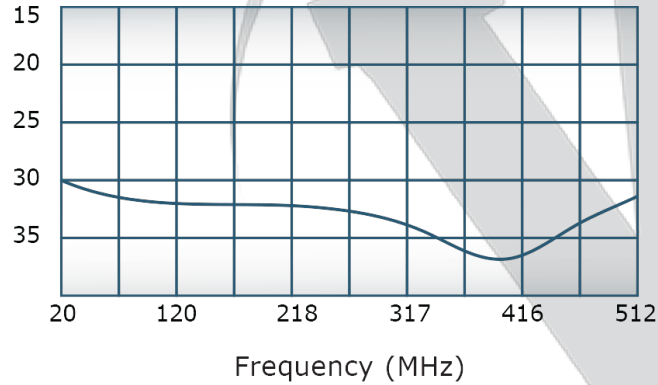
Insertion Loss:



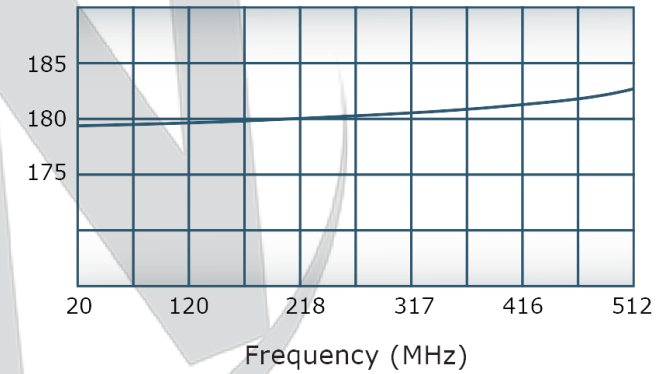
VSWR:



Isolation:



Phase Balance:



Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

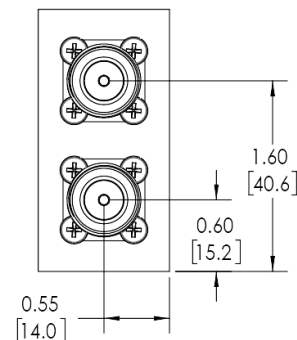
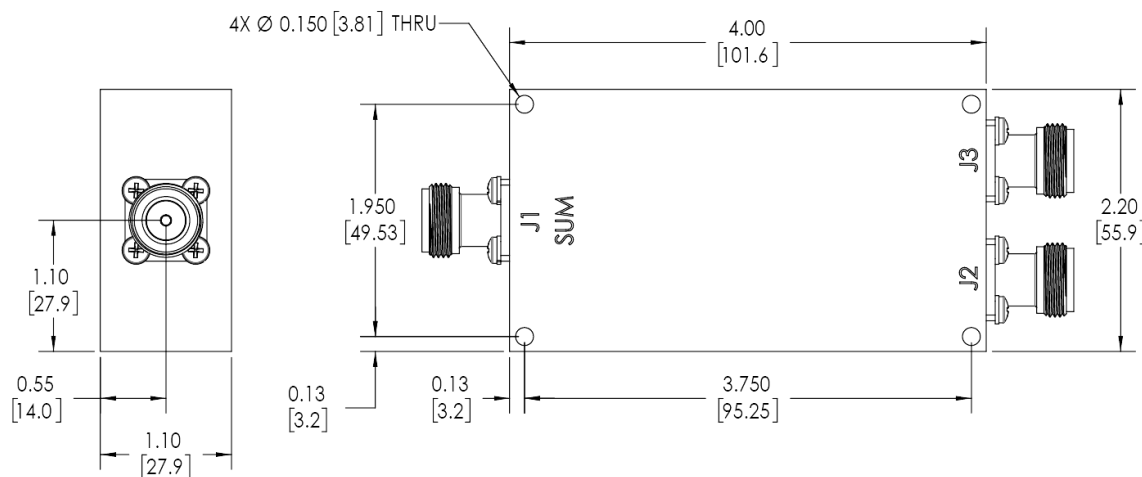
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com


RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Werlatone, Inc.

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		OWN	DATE		WERLATONE [®] SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	12/2/2019			
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE			
		PARENTHESES FOR REFERENCE ONLY		CS	12/2/2019			
		DIMENSIONS ARE IN INCHES		ENGR	DATE	TITLE		
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES		INPR	DATE	OUTLINE		
		TOLERANCES:		REFR	DATE	SIZE		REV
		ANGLES ± 2°		QA	DATE	CAGE CODE		
		3 PL ± .005 [13]		RLSE	DATE	DWG NO		A
		2 PL ± .015 [38]				20215-500		
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX						
		CONCENTRICITY MACHINED DIA. .002 FIM						
		MACHINE TOOL MISMATCH .003 FIM						
NEXT ASSY		USED ON						
APPLICATION		THIRD ANGLE PROJECTION						
						SCALE 1:1		SHEET 1 OF 1

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com