

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

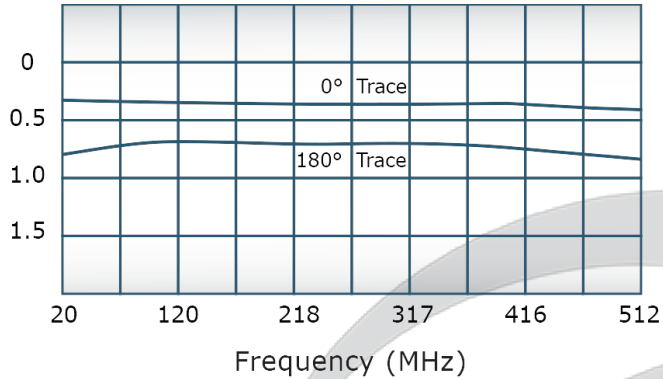


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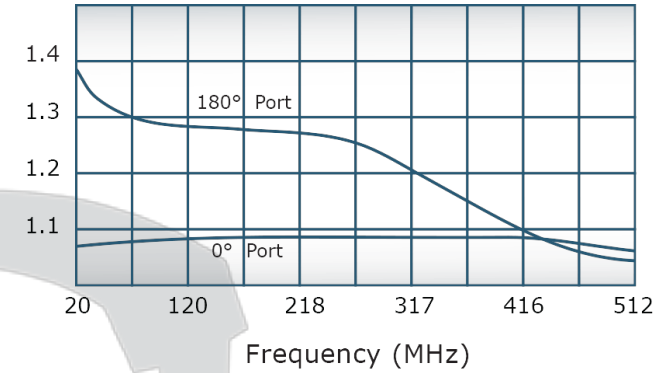
H7814

Performance Data (Specifications subject to change without notice):

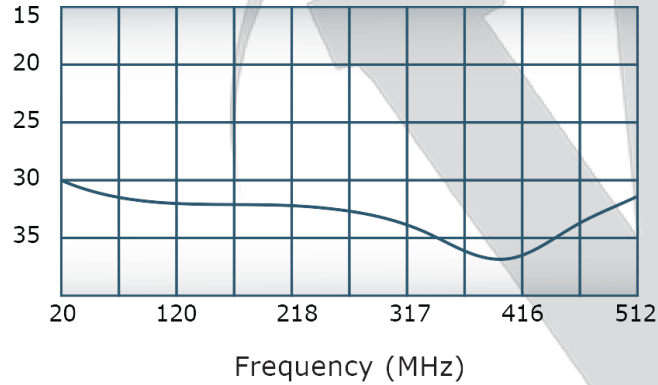
Insertion Loss:



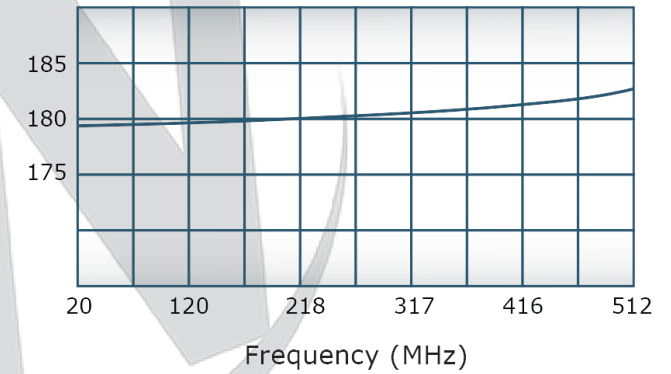
VSWR:



Isolation:



Phase Balance:



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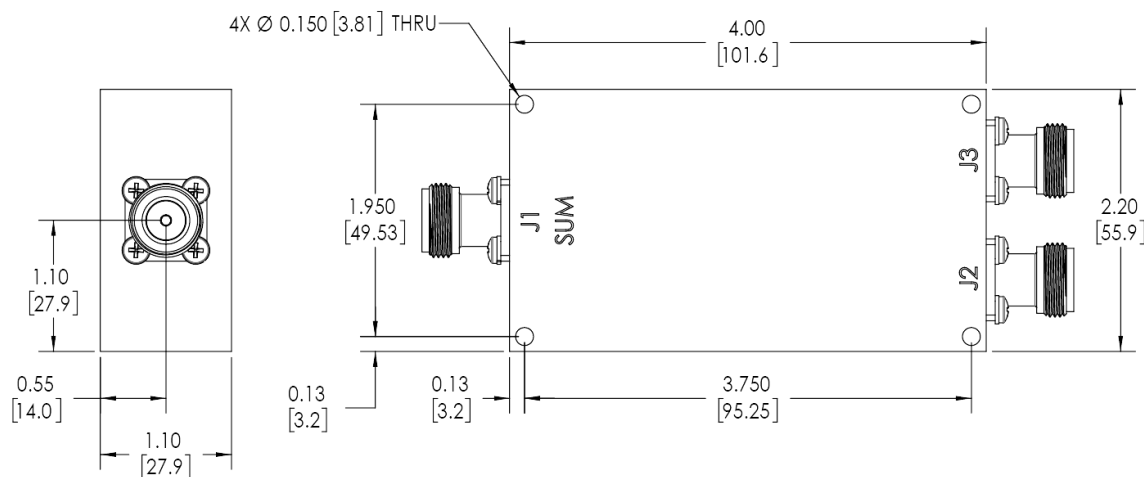
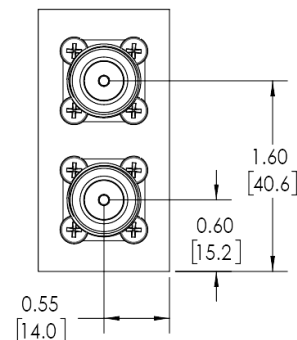
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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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**



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