

PRODUCT DATA SHEET

H7972

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:	100 - 1000 MHz
Power:	50 W CW
Insertion Loss:	1.3 dB Max.
VSWR:	1.30:1 Max.
Phase Balance:	180° ± 5° Max.
Amplitude Balance:	± 0.4 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
Size:	4.0 x 2.2 x 1.1"

Connector Configurations:

Model	Sum Port (J1)	Inputs (J2,J3)
H7972-10	N Female	N Female
H7972-12	N Female	SMA
H7972-102	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.



WERLATONE

Model H7972
180° Hybrids Connectorized

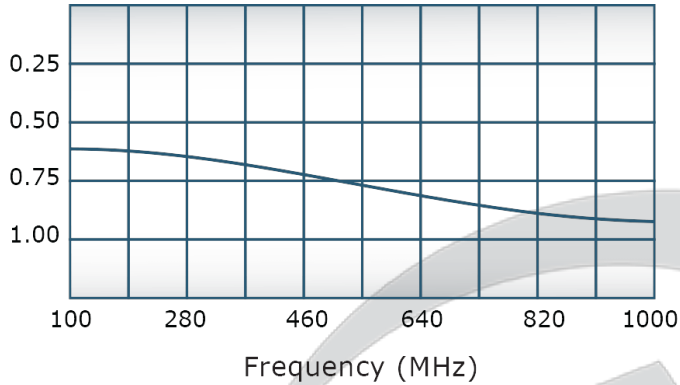


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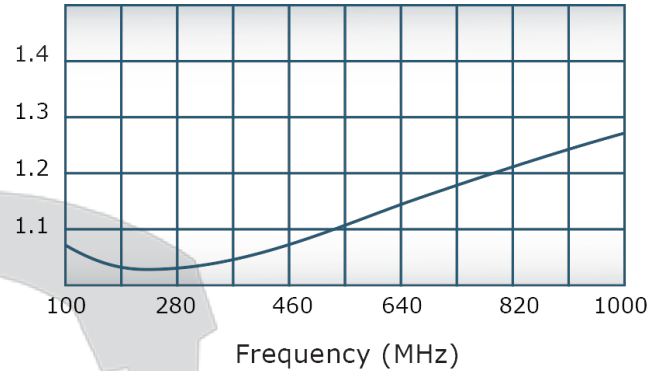
H7972

Performance Data (Specifications subject to change without notice):

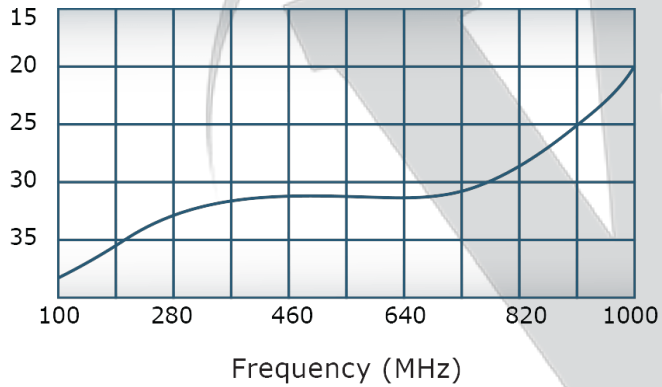
Insertion Loss:



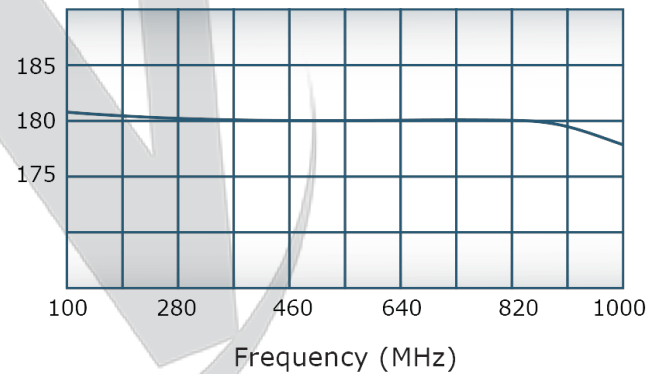
VSWR:



Isolation:



Phase Balance:



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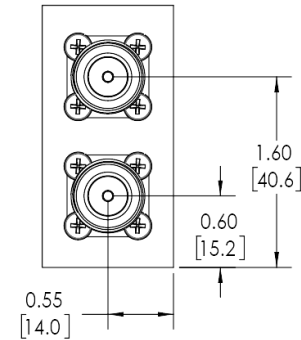
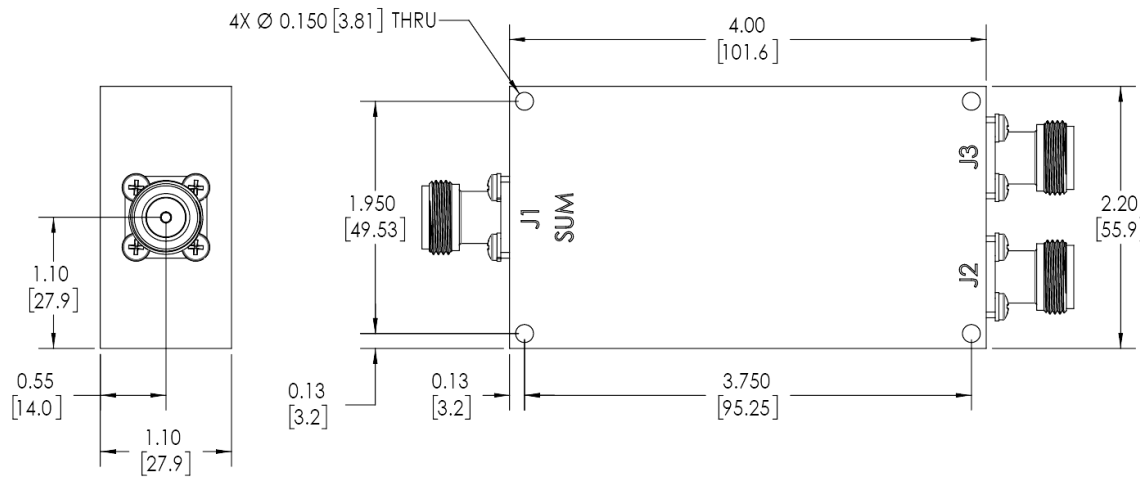
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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

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