



PRODUCT DATA SHEET

H2977

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 - 150 MHz
Power: 200 W CW
Insertion Loss: 0.5 dB Max.
VSWR: 1.30:1 Max.
Phase Balance: $180^\circ \pm 5^\circ$ Max.
Amplitude Balance: ± 0.2 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 lb. 8 oz.
Size: 3.0 x 5.0 x 2.25"

Connector Configurations:

Model	Sum Port (J1)	Diff. Port (J2)	Inputs (J3,J4)
H2977-10	N Female	N Female	N Female
H2977-102	SMA	SMA	SMA
H2977-300	TNC Female	TNC Female	TNC Female

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 H2977

180° Hybrids Connectorized

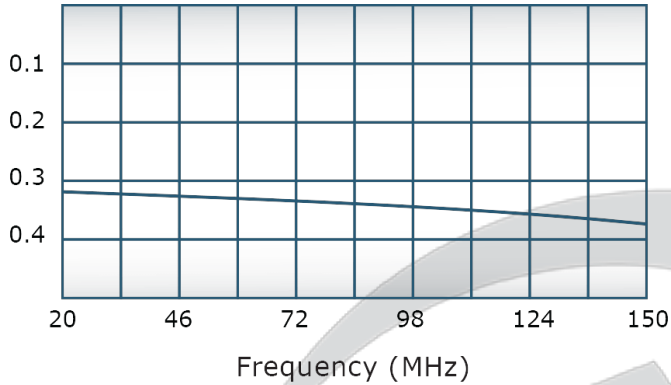


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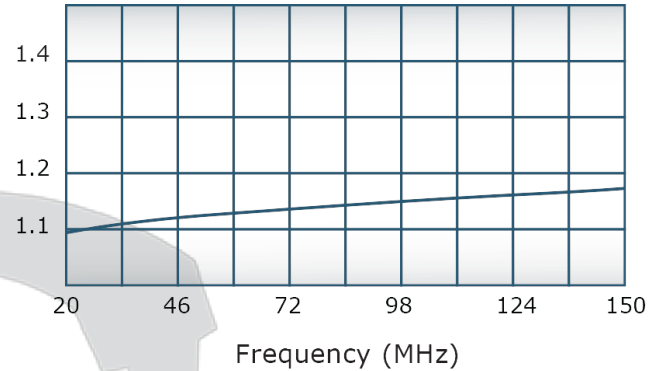
H2977

Performance Data (Specifications subject to change without notice):

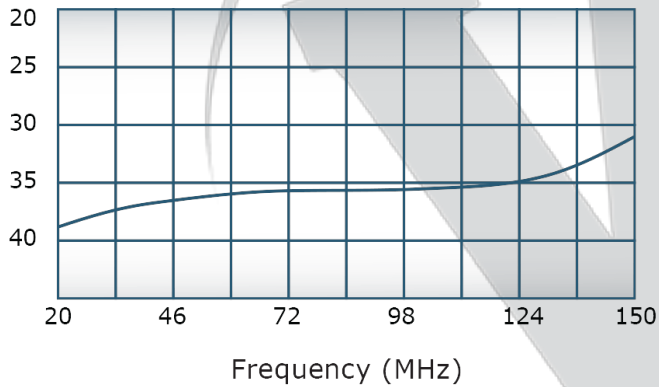
Insertion Loss:



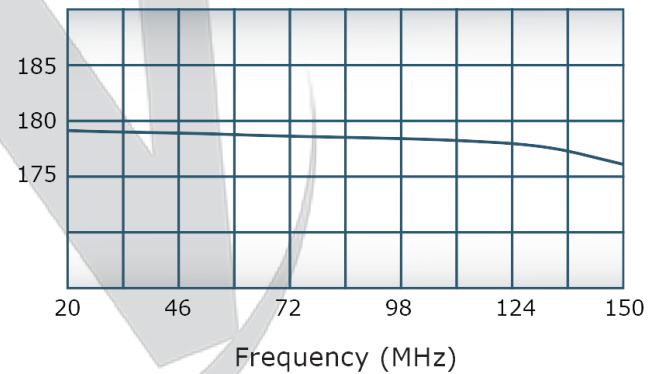
VSWR:



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

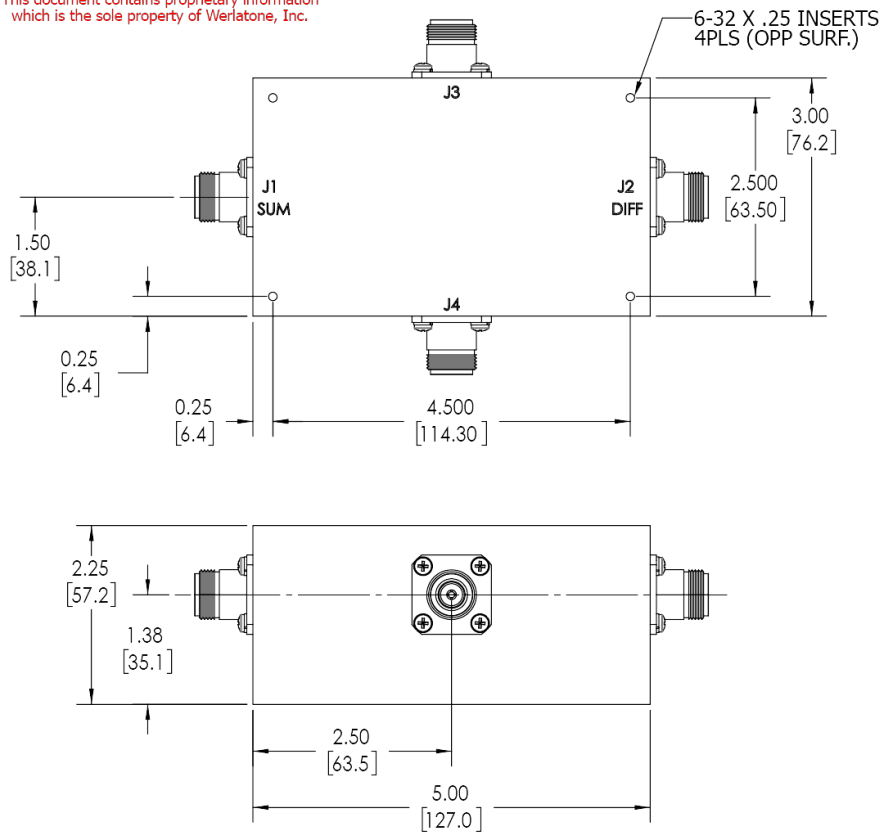
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REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 5376	5/6/11	PR
B	ECN 9696	11/25/2019	RB

NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:**
J1-J4: N FEMALE



		UNLESS OTHERWISE SPECIFIED		DOWN	DATE	11/25/2019		 WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING 100% MIL-STD-100		SD	DATE					
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE					
		PARENTHEetical INFO FOR REF ONLY		CS	DATE	11/25/2019				
		DIMENSIONS ARE IN INCHES		ENGR	DATE					
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES						TITLE		
		TOLERANCES:						OUTLINE		
		ANGLES ± 2°						SIZE		
		3 PL ± .005 [13]						GAGE C/DIE		
		2 PL ± .015 [38]						DWG NO		
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX						REV		
		CONCENTRICITY MACHINED DIA. .002 FIM		QA	DATE			B		
		MACHINE TOOL MISMATCH .003 FIM								
NEXT ASSY		USED ON		RLSE	DATE	10135-500				
APPLICATION		THIRD ANGLE PROJECTION 		5444		1.5		SHEET 1 OF 1		

WERLATONE SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
TITLE		OUTLINE	
SIZE	CAGE CODE	DWG NO	REV
B	10135-500		B
SCALE	SHEET 1 OF 1		
1:1.5			

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