



## PRODUCT DATA SHEET

H10298

**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: 2000 - 6000 MHz  
Power: 100 W CW  
Insertion Loss: 1.0 dB Max.  
VSWR: 1.40:1 Max.  
Phase Balance:  $180^\circ \pm 7^\circ$  Max.  
Amplitude Balance:  $\pm 0.4$  dB Max.  
Isolation: 20 dB Min.

### Mechanical Specifications:

Type: Connectorized  
Material: Aluminum 6061-T6  
Surface Finish: Chem. Film Per MIL-DTL-5541F Type II Class 3 (RoHS/Trivalent)  
Operating Temperature: -55°C to +75°C  
Storage Temperature: -60°C to +85°C  
Size: 2.4 x 1.5 x 0.75"

### Connector Configurations:

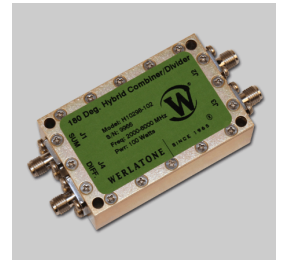
Model	Sum Port (J4)	Inputs (J2,J3)	Diff. Port (J1)
H10298-102	SMA	SMA	SMA

**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 H10298  
180° Hybrids Connectorized

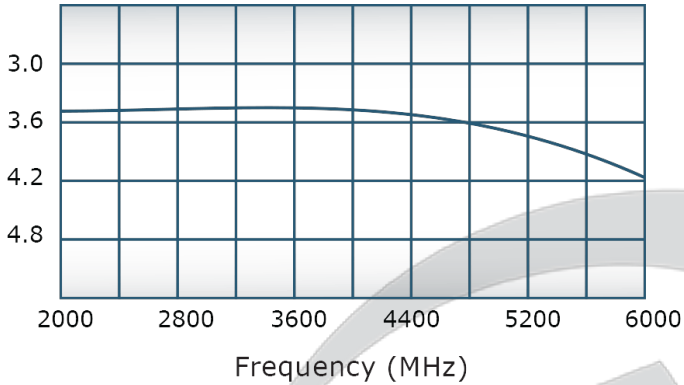


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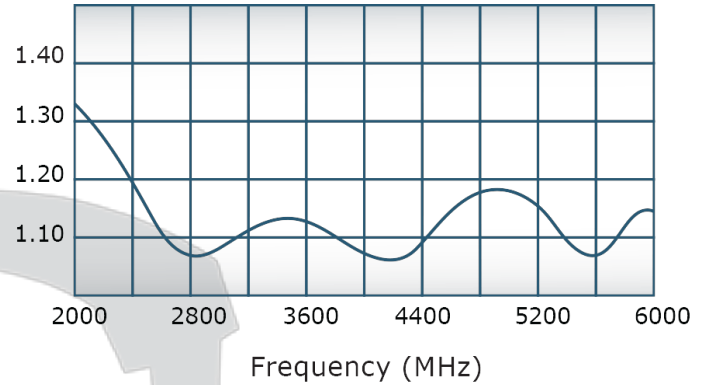
H10298

### Performance Data (Specifications subject to change without notice):

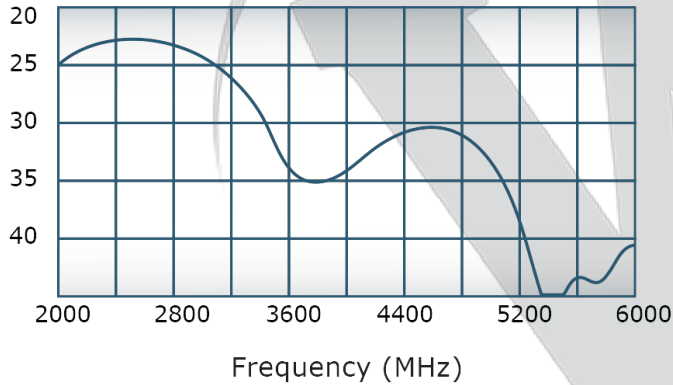
Coupling:



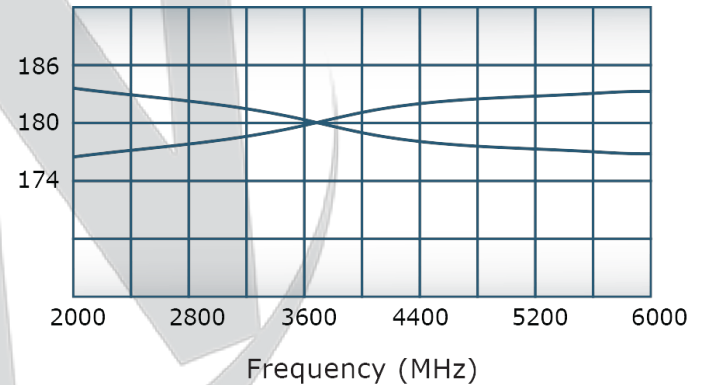
VSWR:



Isolation:



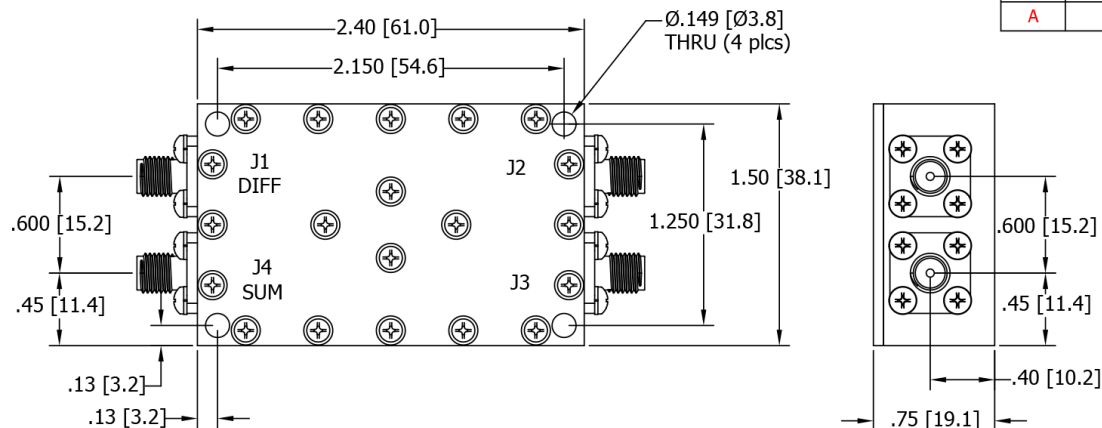
Phase Balance:



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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	Initial Rls	2/24/2015	BW
A	ECN # 9031	2/9/2016	BW

		<div>UNLESS OTHERWISE SPECIFIED</div> <ul style="list-style-type: none"><li>• INTERPRET DRAWING IAW MIL-STD-100</li><li>• DIMENSIONING PER ASME Y14.5M-2009</li><li>• PARENTHESES INFO FOR REF ONLY</li><li>• DIMENSIONS ARE IN INCHES</li><li>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES</li><li>• TOLERANCES: ANGLES ± 2- 3 PL ± .005 2 PL ± .015</li></ul>	DWN	DATE	<div><div>W</div><div>WERLATONE   SINCE 1965</div></div>	<div>17 Jon Barrett Rd Patterson, NY 12563</div>	
	CHK		DATE				
	BW		02/24/15	TITLE			
	ENGR		DATE	Outline			
	BW		02/24/15				
	MFGR		DATE	SIZE	CAGE CODE	DWG NO	REV
21300-300	H10298		QA	DATE	A	28812	
APPLICATION		THIRD ANGLE PROJECTION	RLSE	DATE	SCALE	SHEET 1 OF 1	
					1:1		

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