

## Coaxial 1W 0° 2-Way Power Divider DC – 26.5GHz



#### <u>Features</u>

- High power handling up to 1W
- Wide band operation
- High isolation within operational band
  - Low Insertion Loss

#### **Typical Applications**

- Aerospace and military applications
- Test and Measurement
- Wireless Infrastructure

Electrical Specifications, I <sub>A</sub> =25°C								
Pa	arameters	Min.	Тур.	Max.	Units			
Freq	uency Range	DC		26.5	GHz			
Ins	sertion Loss		7.2	7.5	dB			
	Isolation		12		dB			
In	put VSWR		1.3	1.5	:1			
Ou	itput VSWR		2.0	2.5	:1			
Amplit	Amplitude Imbalance		0.2	0.3	dB			
Pha	se Imbalance		3	4 deg				
Dower Dating	Forward Power		w					
Power Rating	Peak Power		10		w			
Ir	Impedance		50		Ohms			
	Weight	0.5 Max. OL			ounces			
Input / O	utput Connectors	SMA-Female						
	Material	Aluminum						
Finish Gold Plated								

### Electrical Specifications $T_{A}=25 \, C$



### **Environmental Specifications and Test Standards**

Parameter	Description					
Operational Temperature	-40°C~+85°C (Case Temperature)					
Storage Temperature	-50℃~+105℃					
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)					
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis					
High Temperature Burn In	Temperature +85°C for 72 Hours					
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).					
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)					
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)					



### **Typical Performance Plots**

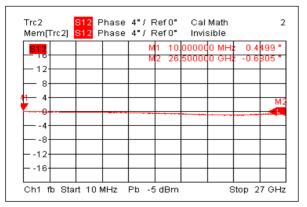
#### Loss & Amplitude Imbalance

Trc3 Mem∏			iB Mag iB Mag				Cal		3
S21				M1	10.00	00000	MHz	-6.090	9 dB
				M2	26.50	00000	GHz	-6.272	9 dB
-2-				M1	10.00	0000	MH IZ	- <del>6.13</del> 6	<del>3 dD</del>
L-3-				M2	26.50	00000	GHz	-6.264	1 dB
-									
-4-									
n -5-									
6-						_			
7									
F-/-									
-8-									
g-									
Ch1 fb Start 10 MHz Pb -5 dBm Stop 27 GHz									

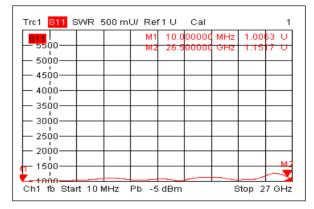
### **Output VSWR**

Trc4 <mark>822</mark> 8	SWR 5	500 m <sup>i</sup>	U/ Ret	f1 U	Cal			4
<b>522</b>			M1	10.0	00000	) MHz	1.66	59 U
5500			- M.	26.9	50000I	) GHz	1.72	10 U
5000								
4500								
4000								
- 3500								
<u> </u>								
- 2500								
4 2000 <u>–</u>								<u>M2</u>
- 1500					<u> </u>			
1								
Ch1 fb Start 10 MHz Pb -5 dBm Stop 27 GHz								

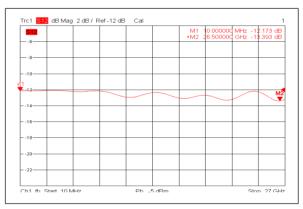
#### **Phase Imbalance**



#### Input VSWR



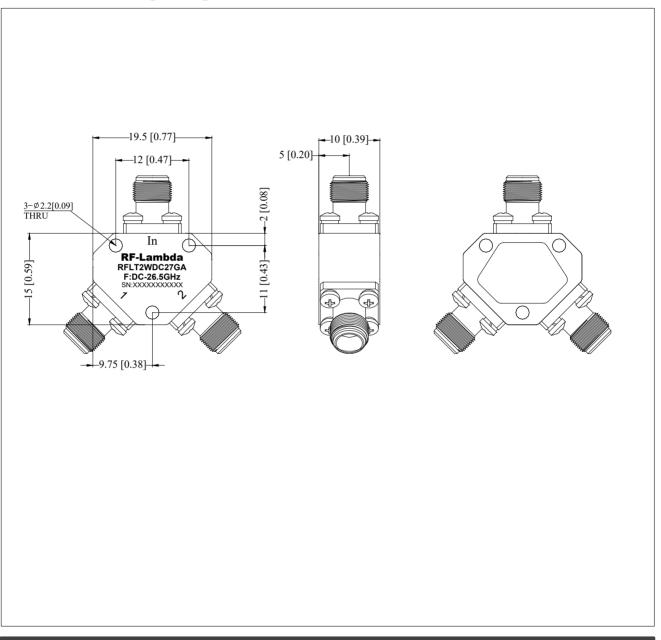
#### Isolation





## **Outline Drawing:**

All Dimensions in mm [inches] Tolerances  $\pm 0.15$  [0.006]



### **Important Notice**

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