

# RFLT4W4G18G

## Coaxial 30W 0°4-Way Power Divider 4 - 18GHz



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

- High power handling up to 30W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

#### **Typical Applications**

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

	Parameter	Min.	Тур.	Max.	Min.	Тур.	Max.	Units		
Frequency Range		4		8	8		18	GHz		
Ν	lominal Splitter Loss		6			6		dB		
	Insertion Loss		0.5	0.8		0.7	1.0	dB		
Isolation		18	20		18	20		dB		
Input VSWR			1.45	1.6		1.4	1.6	:1		
Output VSWR			1.3	1.5		1.3	1.5	:1		
P	Amplitude Imbalance		±0.2	±0.3		±0.3	±0.4	dB		
	Phase Imbalance		±3	±4		±4	±5	deg		
	Forward Power	30 V								
Power Rating	Reverse Power	1								
U	Peak Power	300 (10% Duty Cycle, 1 us Pulse Width)						w		
Impedance		50								
Weight		2.9 Max.								
Input / Output Connectors		SMA-Female								
Material		Aluminum								
	Finish		Blue Paint							

### Electrical Specifications ,T<sub>A</sub>=25 $^{\circ}$ C

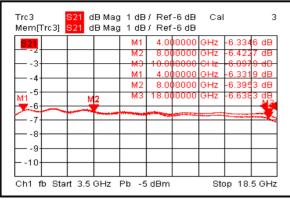
### **Environmental Specifications and Test Standards**

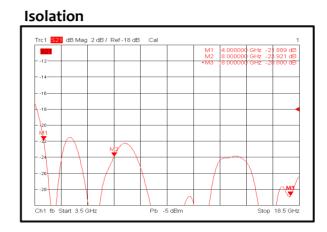
Parameter	Description				
Operational Temperature	-40°C~+85°C (Case Temperature)				
Storage Temperature	-50°C~+105°C				
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)				
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis				
High Temperature Burn In	Temperature +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)				

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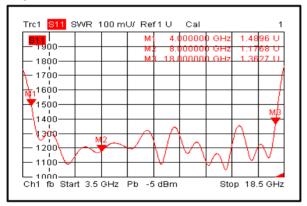
### **Typical Performance Plots**

#### Loss & Amplitude Imbalance

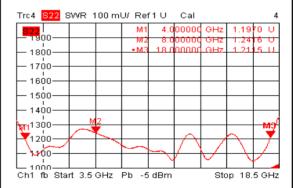




#### Input VSWR



## Output VSWR



#### Phase Imbalance

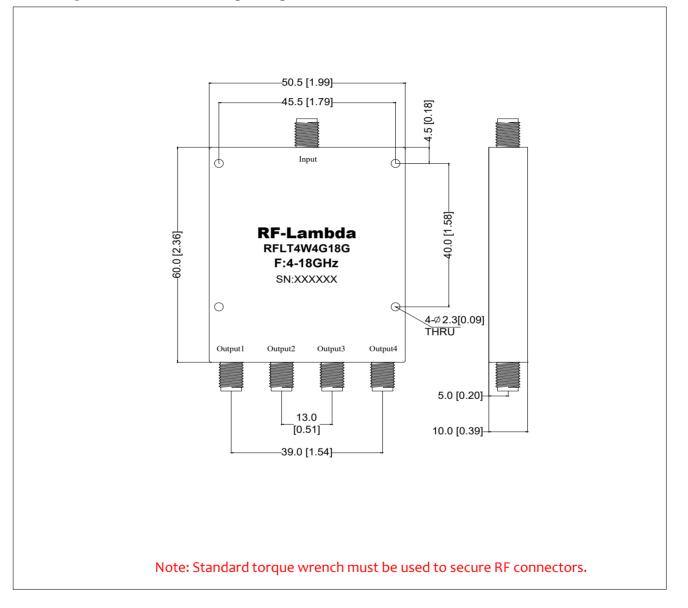
Trc2 Mem[Trc2]	S12 Ph S12 Ph						2
<mark>S12</mark>		- M1	4.	00000	0 GH;	t 0.5	194 °
- 20		- M2	2 8.		0 GH;	z 0.9	184 °
- 15		M	) 10.	00000		t -0.1	744 °
- 10		-					
M1 5	<u>M2</u>	-					мз
		 	********				
		 _					
10		 _					
15							
20							
-20							



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### **Outline Drawing:**

All Dimensions in mm [inches] Outline Tolerances ±0.5 [0.02] Mounting Holes Tolerances ±0.2 [0.008]



### **Important Notice**

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