



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



### Features

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

### Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

### Electrical Specifications, $T_A=25^\circ\text{C}$

Parameter		Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		4		8	8		18	GHz
Nominal 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
Amplitude Imbalance			$\pm 0.2$	$\pm 0.3$		$\pm 0.3$	$\pm 0.4$	dB
Phase Imbalance			$\pm 3$	$\pm 4$		$\pm 4$	$\pm 5$	deg
Power Rating	Forward Power	30						W
	Reverse Power	1						W
	Peak Power	300						W
Impedance		50						Ohms
Weight		2.82						ounces
Input / Output Connectors		SMA-Female						
Material		Aluminum						
Finish		Blue Paint						

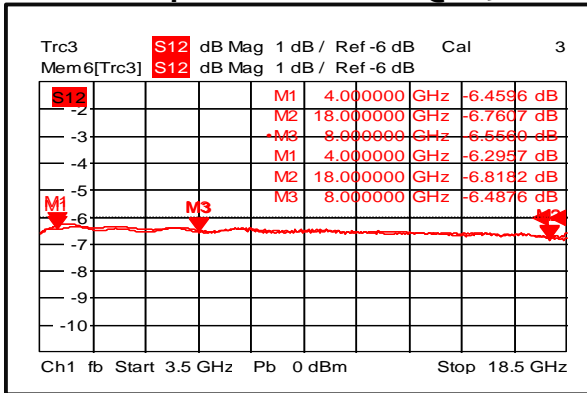
### Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & 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	MIL-STD-883 (For Hermetically Sealed Units)

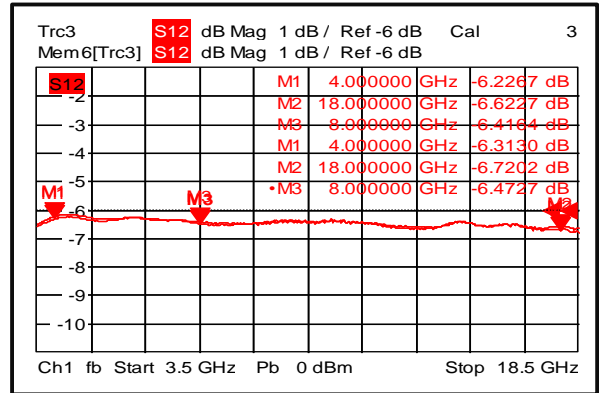


**Typical Performance Plots**

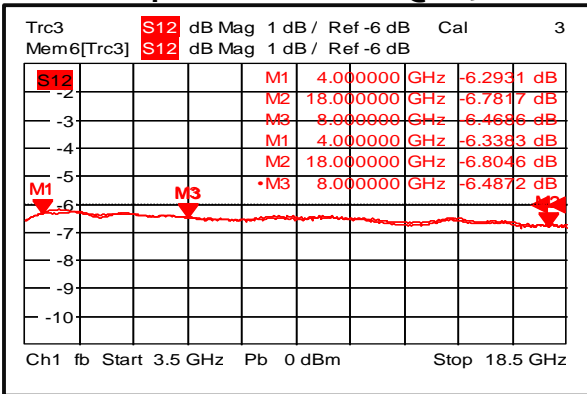
**Loss & Amplitude Imbalance @+25°C**



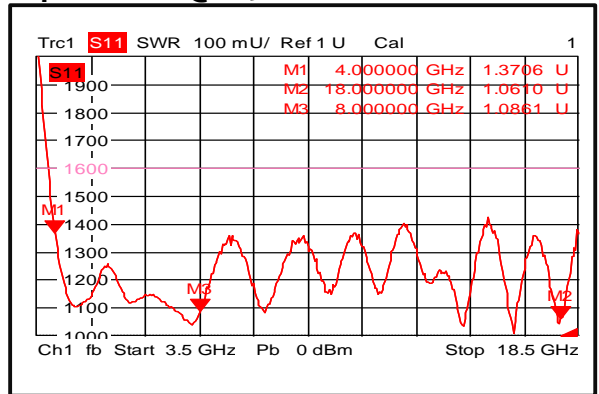
**Loss & Amplitude Imbalance @-45°C**



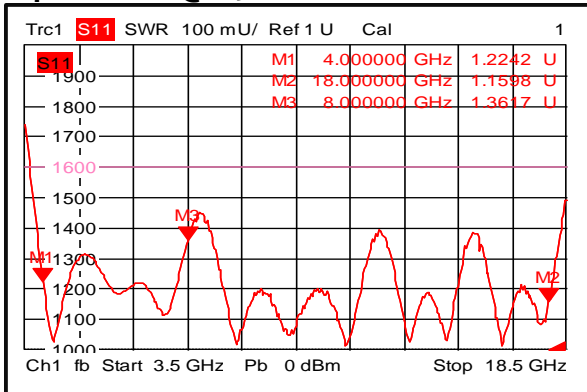
**Loss & Amplitude Imbalance @+85°C**



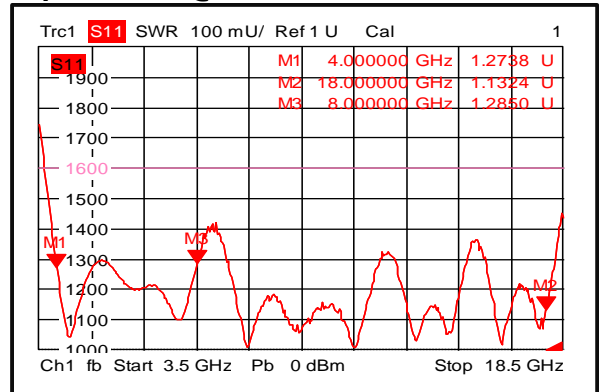
**Input VSWR @+25°C**



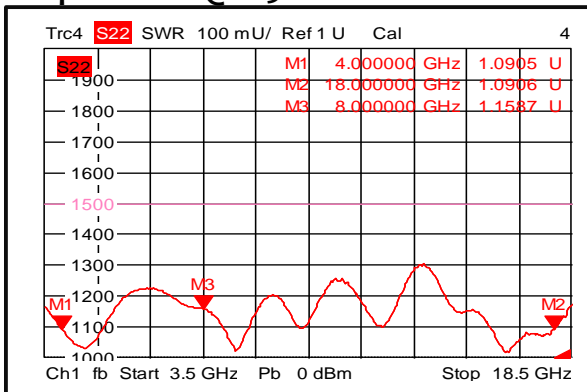
**Input VSWR @-45°C**



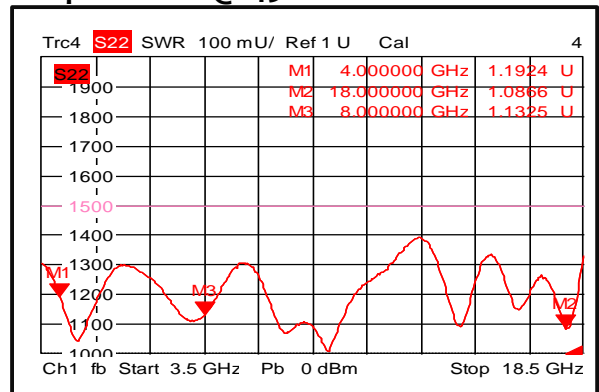
**Input VSWR @+85°C**



**Output VSWR @+25°C**



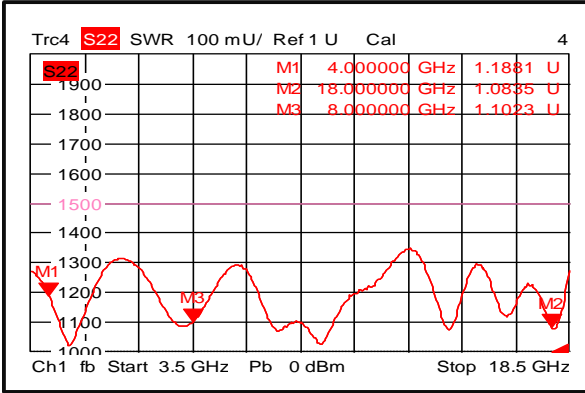
**Output VSWR @-45°C**



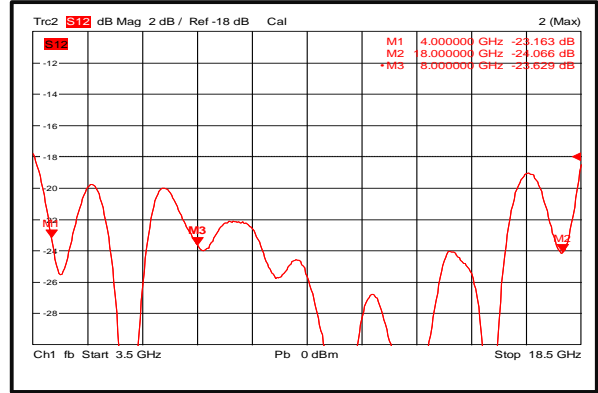
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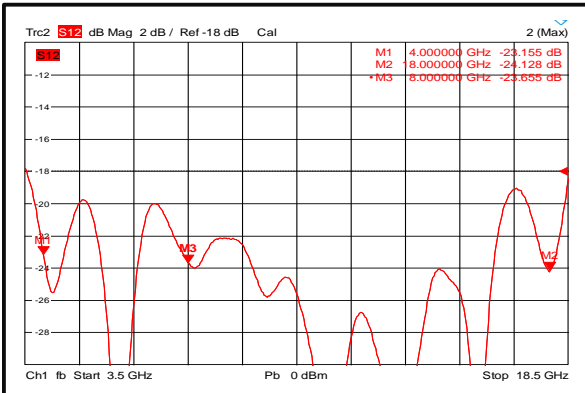
### Output VSWR @+85°C



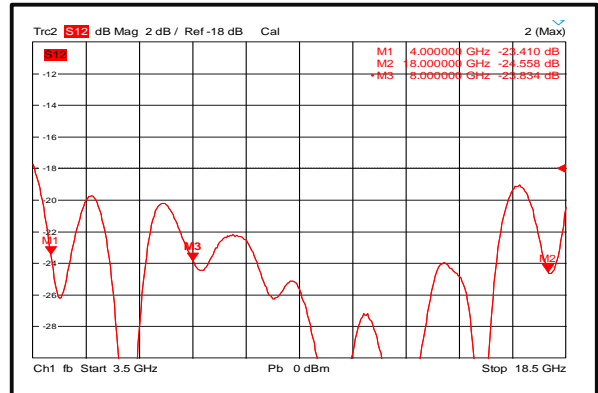
### Isolation @+25°C



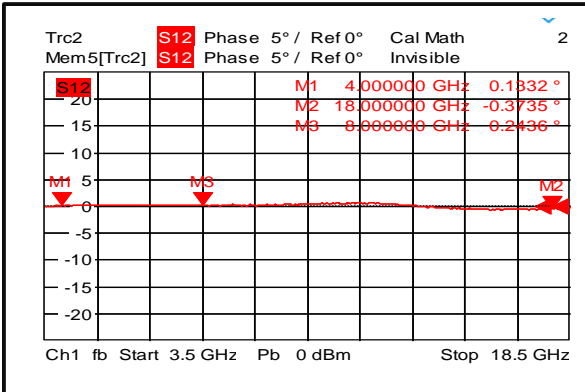
### Isolation @-45°C



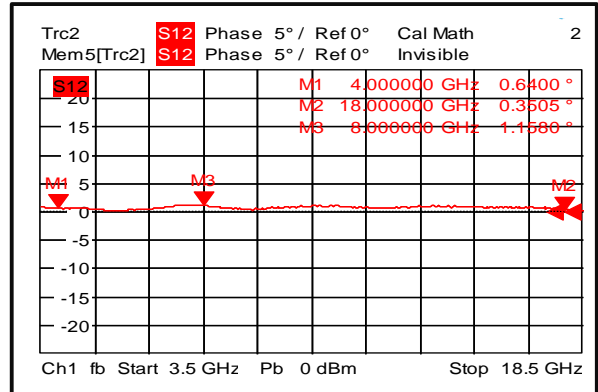
### Isolation @+85°C



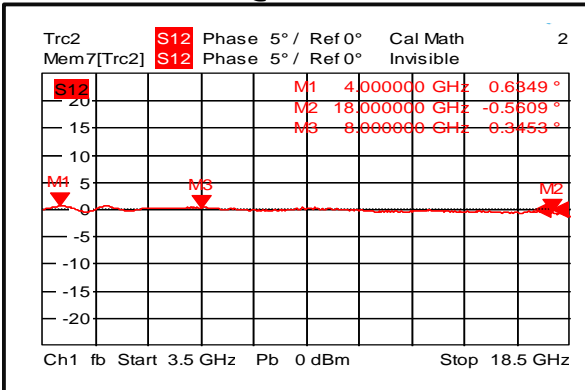
### Phase Imbalance @+25°C



### Phase Imbalance @-45°C



### Phase Imbalance @+85°C



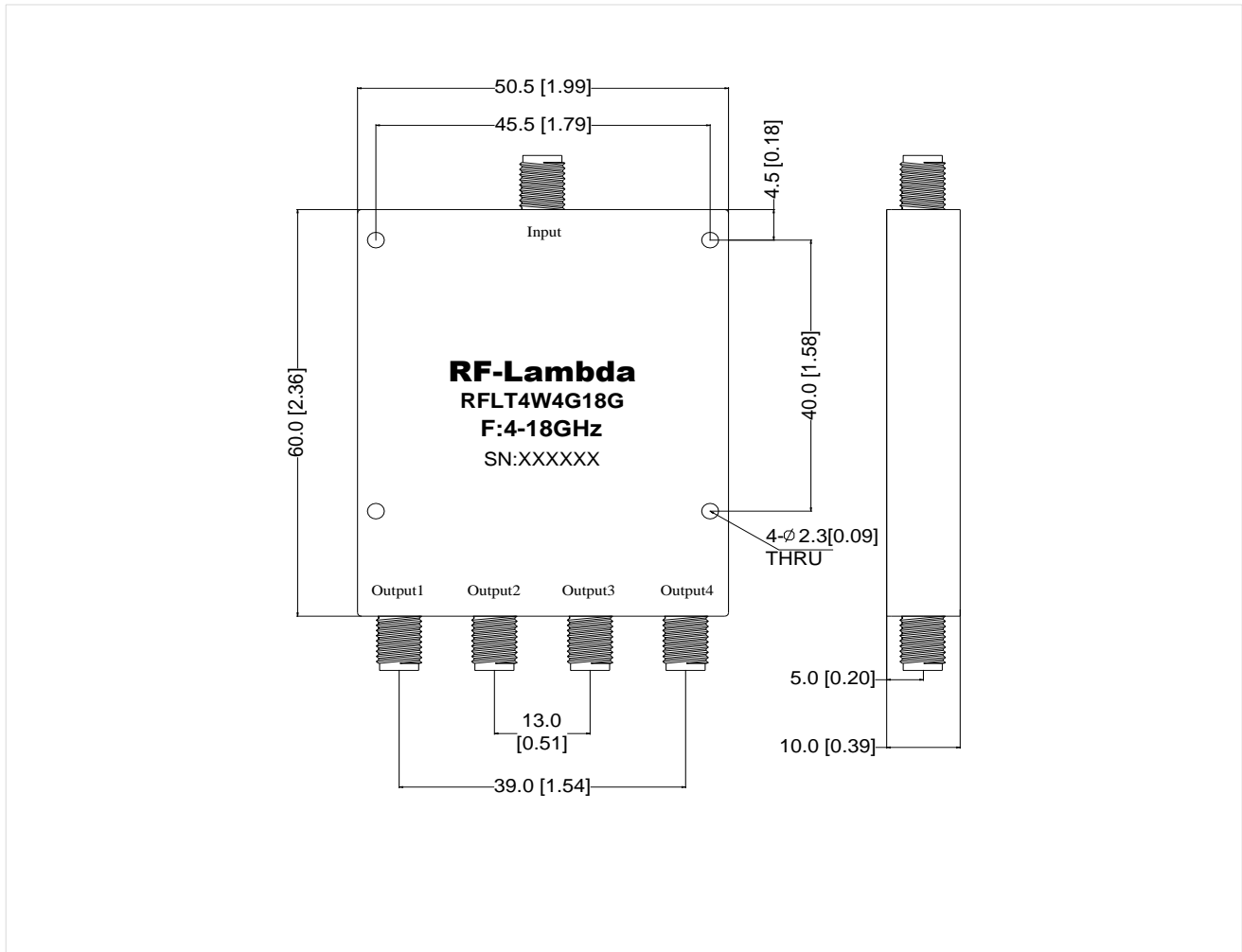
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**Outline Drawing:**

All Dimensions in mm [inches]

Tolerance  $\pm 0.3$  [0.012]



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