



Coaxial 50W 6dB Directional Coupler 4 - 18GHz



Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- Aerospace and military applications
- LMDS multi-carrier operation
- High peak to average handling capability
- All specifications can be modified upon request

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

Parameters		Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		4		8	8		18	GHz
Nominal Coupling		5.5	6	7	5.5	6	7	dB
Frequency Sensitivity			± 0.5	± 0.7		± 0.5	± 0.7	dB
Directivity		15	17		12	14		dB
Insertion Loss (Excl Coupling)				0.5			0.5	dB
Insertion Loss (true)			1.5	1.8		1.7	1.9	dB
VSWR Primary			1.3	1.4		1.4	1.5	: 1
VSWR Secondary			1.3	1.4		1.4	1.5	: 1
Power Rating	Average	50						W
	Peak	300						W
Impedance		50						Ohms
Weight		1.41						Ounces
Input / Output Connectors		SMA-Female						
Material		Aluminum						
Finishing		Blue Paint						

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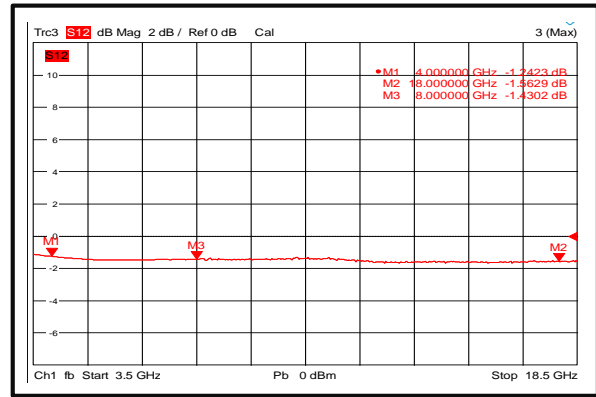


Environmental Specifications

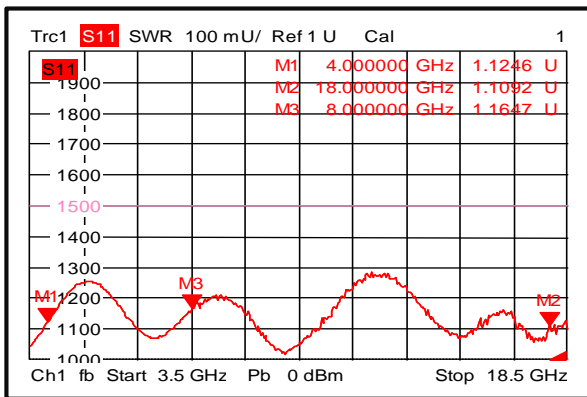
Operational Temperature (°C)	-45 to +85
Storage Temperature (°C)	-55 to +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msec half sine wave, 3 axis both directions

Typical Performance Plots

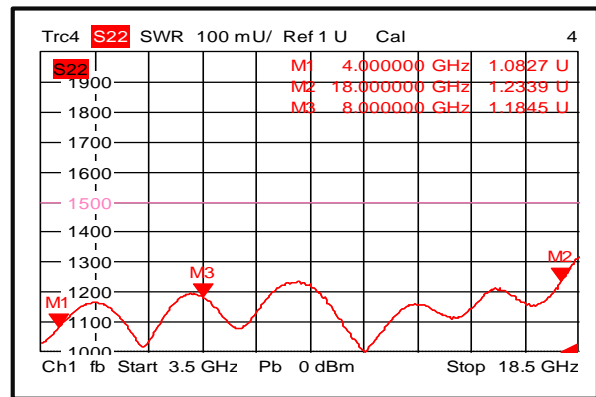
Insertion Loss



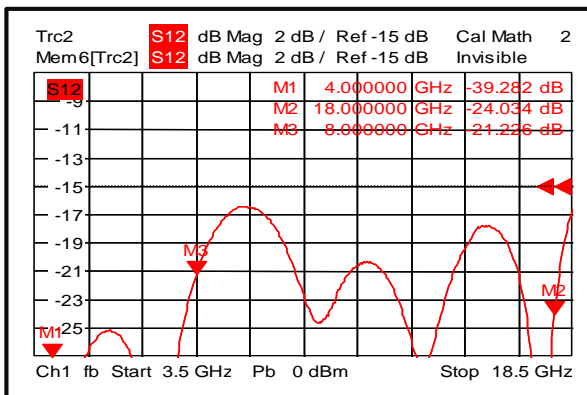
Primary VSWR



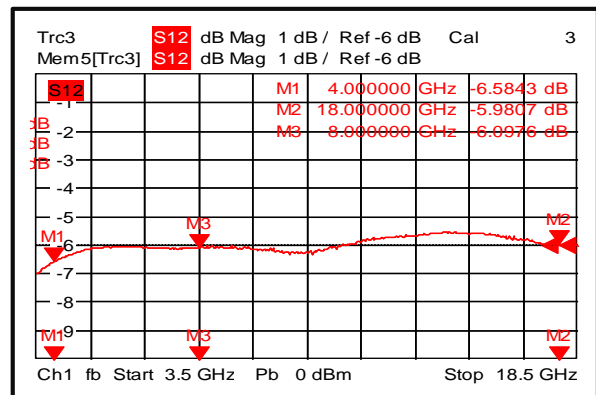
Secondary VSWR



Directivity



Nominal Coupling



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RF-LAMBDA

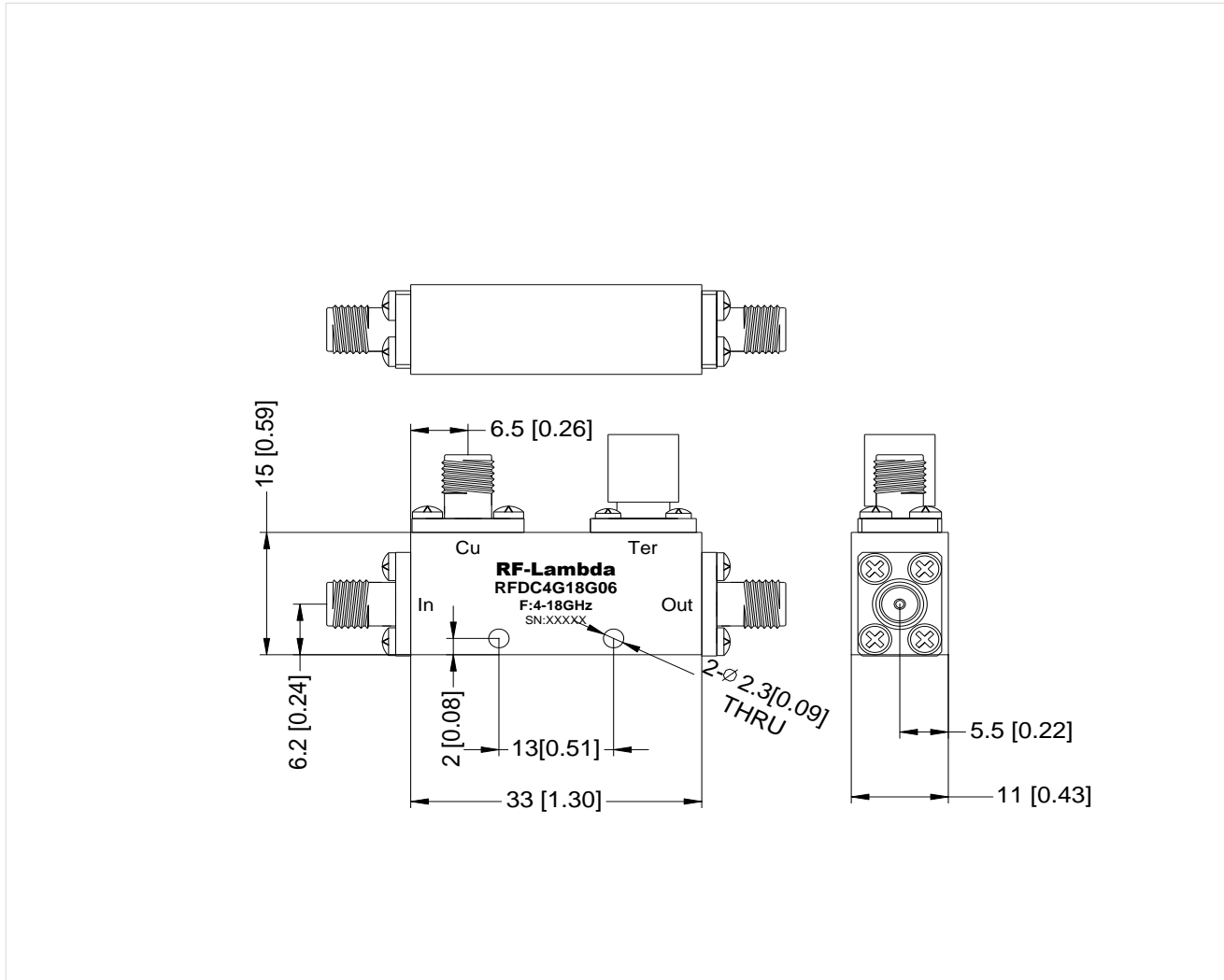
LEADER OF RF BROADBAND SOLUTIONS

RFDC4G18G06

Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.2 [0.008]



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