



Limiter Modules

2970 Series

Features

- Broadband Frequency Ranges
- Environmentally Sealed
- Stripline Compatible
- Small Size
- High Power, Low Loss

Description

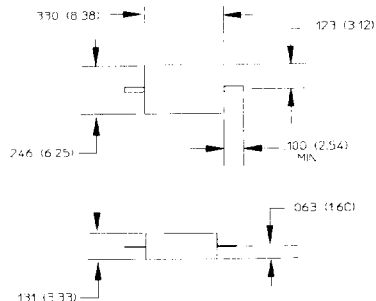
M/A-COM's limiter modules offer exceptional performance over a broad frequency range (0.5-18.0 GHz). This performance results from our internal diode manufacturing capabilities and circuit design experience. The stripline compatibility of these modules allows them to be integrated into higher level assemblies to protect a wide range of power sensitive devices from excessive RF power or voltage levels.

Environmental

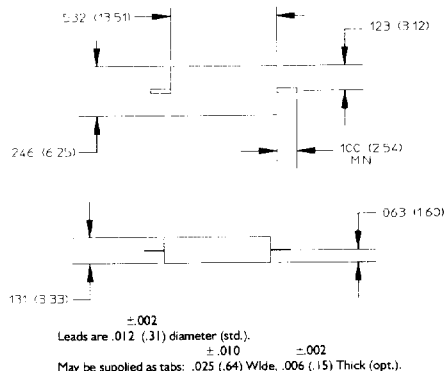
These devices are designed to meet the following screening conditions:

Test	MIL-STD	Method	Cond
Non-Destructive Bond Pull	883	2023	
Internal Visual	M/A-COM	QCP	H076
Stabilization Bake	883	1008	B
Thermal Cycle	883	1010	B
Constant Acceleration	883	2001	A (YI Axis)
Burn-in	883	1015	125°C
Seal	Fine	883	1014 AI
	Gross	883	1014 CI
External Visual	883	2009	

Part Number 2970-1XXX



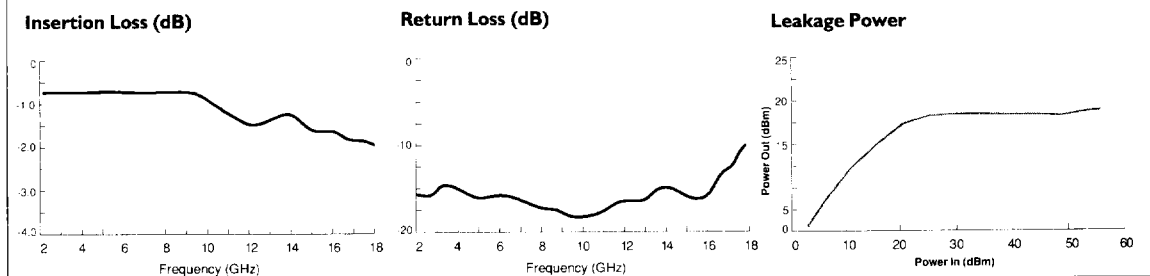
Part Number 2970-2XXX



Maximum Ratings

Storage Temp.	-65°C to +125°C
Operating Temp.	-55°C to +85°C

Typical Performance Data 2970-2004



Specifications Subject to Change Without Notice.

M/A-COM Inc. ■ 1011 Pawtucket Boulevard, Lowell, MA 01853 USA

■ Telephone: 800-366-2266

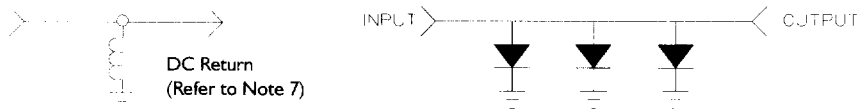
2970-Series
Specifications 25°C

Frequency Range (GHz)	Insertion Loss (dB)	VSWR	CW Power (W)	Peak Power (W)	Leakage Power (mW)	Part Number
0.5-2.0	0.7	1.5:1	3.0	200	150	2970-1001
	0.9	1.5:1	5.0	1500	150	2970-2001
2.0-8.0	1.0	1.7:1	2.0	200	125	2970-1002
	1.3	1.7:1	3.0	1000	125	2970-2002
8.0-18.0	1.6	1.9:1	2.0	200	100	2970-1003
	2.2	2.0:1	3.0	600	100	2970-2003
2.0-18.0	1.7	2.0:1	2.0	200	125	2970-1004
	2.2	2.0:1	3.0	600	125	2970-2004

Notes:

1. Insertion loss and VSWR measured at -20 dBm input power.
2. Peak input power rated at 1 microsecond pulse width, .001 duty cycle.
3. 1 dB compression point: +7 dBm min.
4. Spike leakage: 0.1 erg. max.
5. Recovery time: (3 dB point) 100W pulse or max. input for pulses less than 100W:
1000 nS max. 2970-2XXX series
500 nS max. 2970-1XXX series.
6. Risetime of RF input pulse 100 nS min.
7. All models require external dc returns (less than 1Ω).

Typical Schematic 2970-2004



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