

Limiting Amplifier

500-2500MHz

Model Number: OC-LA0.5-2.5K50A

The model OC-LA0.5-2.5K50A is a broadband, low noise, high gain limiting amplifier operating between 500 MHz and 2500 MHz and handling a wide dynamic range from -50dBm to +10dBm. The employment of FET devices with good consistency in manufacturing ensures this module exceptional amplitude limiting performance. It is the key component of the electronic system.

FEATURES:

- Broadband;
- Low Noise;
- High Gain;
- Small Size & Light Weight;
- Good Consistency;

ELECTRICAL SPECIFICATIONS @ +12.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	500		2500	MHz
Input Power	P _{in}	-50		+10	dBm
Limited Output Power	P _{out}	+9		+13	dBm
Noise Figure	NF		3.5		dB
Harmonic Rejection	H		10		dBc
VSWR @ Input Port	IN VSWR			2.0:1	
VSWR @ Output Port	OUT VSWR			2.0:1	
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC		+12		Volt
DC Current	IDD		200	280	mA

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	100x45x20 [3.94x1.77x0.79]	mm [inch]	Maximum
Weight	240 [0.53]	g [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	FEEDTHRU CAPACITOR		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	°C	
Non-operating Temperature	-40		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

Absolute Maximum Rating

Input RF drive level without damage	+13 dBm
DC Voltage	+15 V

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OUTLINE DRAWING (All dimensions in mm [inch])

