

USMC0125 Low Noise Broadband Amplifier

1 MHz - 2.5 GHz



- **MULTIPLE APPLICATIONS**

Electromagnetic Compatibility (EMC) testing
Instrumentation
Antenna field measurements
Communication systems

- **BROADBAND PERFORMANCE**

30 dB of flat gain from 1 MHz to 2.5 GHz

- **OPTIONAL BUILT-IN BATTERY**

2000 mA/H NiMH internal battery allows for many hours of operation in the field

- **READY FOR THE TOUGHEST ENVIRONMENT**

Wide operating temperature range. IP65 compliant

The USMC0125 low noise broadband amplifiers by US Microwave Laboratories offer exceptional performance at a very competitive price. Covering a bandwidth of more than 11 octaves, they provide outstanding flatness, 30 dB of gain, very low noise figure, and an optional built-in 2000 mA/H NiMH battery for field operation. The units are IP65 compliant and can be used in wet environments.

These amplifiers are ideal for Electromagnetic Compatibility (EMC) testing and certification. The low noise figure and high gain of the USMC0125 permit the visualization of signals that would otherwise appear below the noise floor in a radiated emissions test. Designed and manufactured in the U.S.A., the USMC0125 conforms to the European RoHS requirements and is ECCN EAR99.



RF & microwave components and equipment

All our products are designed and manufactured in the U.S.A.



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Specifications subject to change without notice

Electrical specifications (valid over the entire temperature range)

	USMC0125A (external DC power)			USMC0125B (internal battery)			UNIT
	Min	Typ	Max	Min	Typ	Max	
Frequency range	1		2500	1		2500	MHz
Gain	30	31.5	33	30.5	31.5	32.5	dB
Input return loss	10		26	10		26	dB
Output return loss	10		28	10		28	dB
P1dB	15	20	21	15	20	21	dBm
Noise figure	1.5	2.2	3.5	1.5	2.2	3.5	dB
Non-harmonic spurious			-70			-70	dBc
Operating supply voltage	7		28	12	15	17	V DC
Absolute maximum & continuous supply voltage			30			26	V DC
Current consumption (depends on DC voltage)	120 (7 V)	65 (12 V)	30 (28 V)	65		570	mA
ESD & transient protection	Yes, RF input, RF output and DC						
Reverse polarity protection	Yes, non destructive						
Maximum input/reverse output power			17			17	dBm
Maximum input/output DC voltage			10			10	V DC

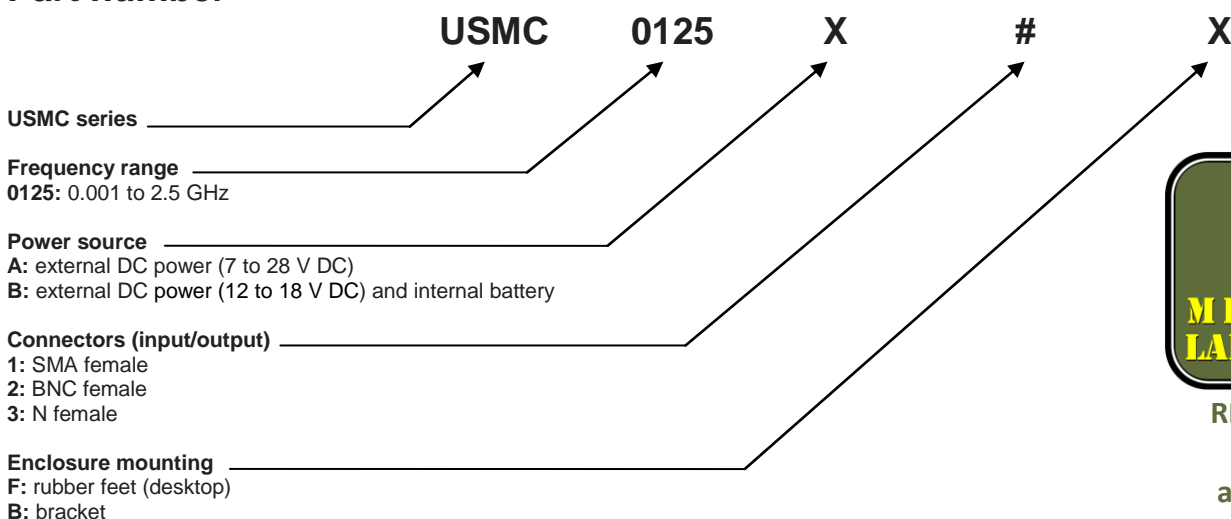
Mechanical and environmental specifications

	USMC0125A (external DC power)		USMC0125B (internal battery)		UNIT
	Min	Max	Min	Max	
Operating temperature	-30 to 85		0 to 50		°C
DC supply connector	Waterproof circular connector with threaded lock				
Dimensions (excl. connectors and feet)	W: 4.25 (108.0), H: 2.31 (58.61), D: 6.73 (171.0) no bracket; 7.52 (191.0) with bracket				inch (mm)
Weight	1.44 (653)		1.88 (852)		lb (g)
IP rating	IP65				

Accessories

External AC adaptor: 90 to 264 V AC, 47 to 63 Hz; European and US plugs; -20 to 60 °C operation; CE and UL approved.

Part number



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