

USMC0125 Low Noise Broadband Amplifier



- **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**

More than 10 hours of operation in the field

- **READY FOR THE TOUGHEST ENVIRONMENT**

Wide operating temperature range. IP65 / IP60 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 battery for more than 10 hours of field operation.

These amplifiers are ideal for Electromagnetic Compatibility (EMC) testing and certification. The low noise figure and high gain of the USMC0125 permits 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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Phone: (+1) 336-582-0603

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	31.5	33	dB
Input & output impedance	50			50			ohm
Input VSWR	2.5:1			2.5:1			dB
Output VSWR	2.5:1			2.5:1			dB
P1dB	15	20	21	15	20	21	dBm
Noise figure > 50 MHz	1.5	2.2	3.5	1.5	2.2	3.5	dB
Non-harmonic spurious	-70			-70			dBc
Operating supply voltage	8	12	15	15	16.5	18	V dc
Current consumption (depends on dc voltage and battery charge level)	150			65 (15 V)	550 (15 V)		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

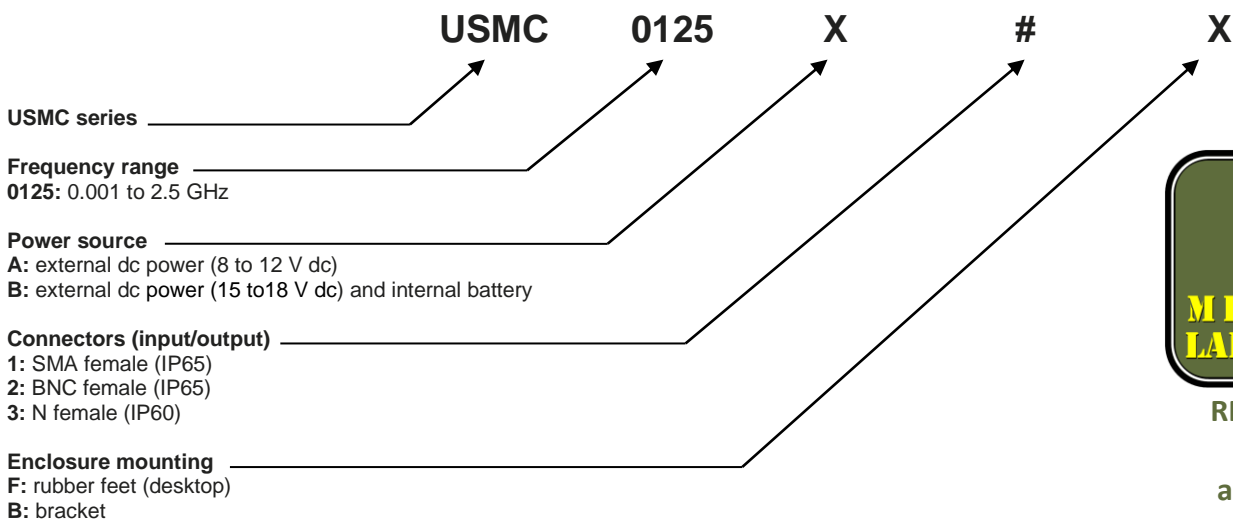
Mechanical and environmental specifications

	USMC0125A (external dc power)	USMC0125B (internal battery)	UNIT
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	1.45 (0.65)	2.5 (1.1)	lb (kg)
IP rating	IP65 with BNC and SMA connectors / IP60 with N connectors		

Accessories

External ac adaptor: 90 to 264 V ac, 47 to 63 Hz; European and US plugs; CE and UL approved.

Part number



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