

# MicroRAM

MILITARY

## RIPPLE ATTENUATOR MODULE

### FEATURES

- >40 dB ripple attenuation from 60 Hz to 1 MHz
- 20 – 30 Amp ratings
- 3 – 30 Vdc input range
- Efficiency: Up to 98%
- Environmental stress screening
- Integrated ORing diode supports N+1 redundancy
- Combined active and passive filtering
- Size: 2.28" x 1.45" x 0.5"



### PRODUCT INFORMATION

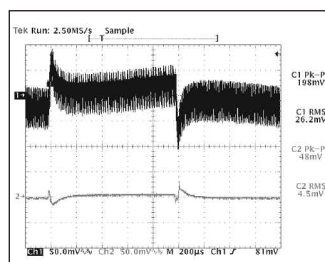
Vicor's **MicroRAM** output ripple attenuation module combines both active and passive filtering to achieve greater than 40 dB of noise attenuation from 60 Hz to 1 MHz. The MicroRAM operates over a range of 3 to 30 Vdc, is available in either 20 or 30 A models, and is compatible with all manufacturers switching converters including Vicor's MI-200, MI-J00 Family and Maxi, Mini, Micro Family DC-DC converters.

The MicroRAM's closed loop architecture greatly improves load transient response and with dual mode control, insuresprecise point-of-load voltage regulation. The MicroRAM supports redundant and parallel operation with its integrated ORing diode function.

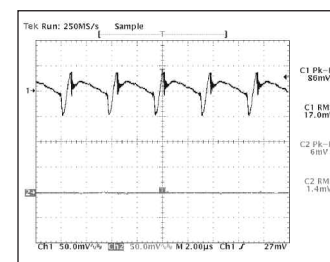
It is available in Vicor's standard Micro package (quarter brick) with a variety of terminations for through-hole, socket, or surface-mount applications.

### GENERAL SPECIFICATIONS

PARAMETER	MIN	TYP	MAX	UNIT	NOTE
Output ripple			10.0	mV p-p	
Input voltage range	3.0		30.0	Vdc	
Operating current					
uRAM2xxx	0.02		20	A	No internal current limiting
uRAM3xxx	0.02		30	A	No internal current limiting
Power Dissipation					
uRAM2xxx					
Vhr 380 mV @ 1 A		7.5		W	Vin 28 V; Iout 20 A
uRAM3xxx					
Vhr 380 mV @ 1 A		11.5		W	Vin 28 V; Iout 30 A



Typical input and output dynamic response. CTRAN; 35% of load



Typical input and output ripple @ 50% (10 A) load

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### PART NUMBERING

uRAM	2	M	2	1
Product Type	Current Rating	Product Grade	Pin Style	Baseplate
	2 = 20 A 3 = 30 A	H = -40°C to +100°C M = -55°C to +100°C	1 = Short Solder 2 = Long Solder S = Short ModuMate <sup>[a]</sup> N = Long ModuMate <sup>[a]</sup>	1 = Slotted 2 = Threaded 3 = Through Hole

[a] Compatible with SurfMate and InMate socketing systems

### MECHANICAL DRAWING $\frac{in}{(mm)}$

