



**PERFORMANCE SPECIFICATIONS:**  
 [Tested with one millivolt input signal, and 9 volt supply, or as otherwise indicated].

- 1) Frequency Response: -1 dB at 8Hz and 60KHz
- 2) Gain at 1000 Hz: 15.6 dB +/- 0.1 dB
- 3) DC Current Drain (w/capsule): 180 microamperes
- 4) Maximum Output at Clipping (1000 Hz): 2V RMS
- 5) Noise above 1 KHz: -115 dBV/Hz  
 rising to -102 dBV at 100 Hz and -92 dBV at 25 Hz.  
 Total noise, 20 KHz bandwidth: 63 microvolts.  
 A-weighted, 20 KHz bandwidth: 33 microvolts.
- 6) Capsule excitation voltage: 3.75 volts nominal  
 +/- 0.02 variation with supply from 5 to 12 volts.

Parts List for MM2-5347 Microphone Preamp

R1	1K	C1	33/16	D1	1N4148
R2	2.74K	C1A	0.018	L1	F-bead
R3	33K	C2	330 Pf	IC1	MAX438
R4	151K	C3	3.3/35	IC2	MAX402
R5	151K	C4	22/16		
R6	3.57K	C5	33/16		
R7	18.2K	C6	0.047		
R8	150	C7	22/16		
R9	100K	C8	68 Pf		
		C9	10/35		

- F. Example capsule: Panasonic WM-060
- E. Pins are on a 0.10 grid.
- D. Max suggested loading; 10K and 0.002 uFD.
- C. Amplifiers are 100% tested for current drain, frequency response and gain.
- B. Polarity protection diode D1 may not be present in some units.
- A. Amplifiers are ultrasonically cleaned for 5 minutes in ChemSolv ES125.
- NOTES:

Rev	Date	By	Description
B	6/22/96	rhc	rev noise specs
A	6/1/96	rhc	Initial Release

MM2-5347 Microphone Preamp

DATE	6/16	Electret Microphone
BY	RHC	
CHECKED		Preamplifier - 9V
PROJECT	MM2	MM2-5347-001
SCALE	NONE	

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