## Tiny Electret Microphone Pre-Amplifier Using OPA172





The single supply microphone pre-amplifier amplifies the output signal of an electret capsule microphone to audio line levels. An op amp is used as a trans-impedance amplifier to convert the output current from the microphone in to a signal level voltage. The circuit works with 9V so it is good choice for battery operated systems.

## **Features**

Supply 9V DC Current Approx. 3mA On Board Microphone Very thin and narrow PCB

ВОМ			
SR.	QNTY.	REF.	DESC.
1	1	CN1	3 PIN HEADER
2	4	C1,C3,C5,C6	2.2uF/16V SMD 1210
3	1	C2	10PF SMD 0805
4	1	C4	0.1uF SMD 0805
5	1	MK1	MICROPHONE
6	1	R1	10K SMD 0805
7	1	R2	75K SMD 0805
8	3	R3,R5,R6	100K SMD 0805
9	1	R4	49.9E SMD 0805
10	1	U1	OPA172IDBR SMD



























