



# Square SMT Electret Condenser Microphone

## SEM0506A

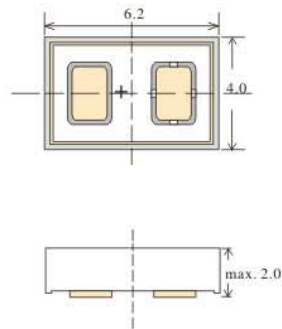
### Appearance



### Dimensional Drawing

Units: mm

### SEM0506A

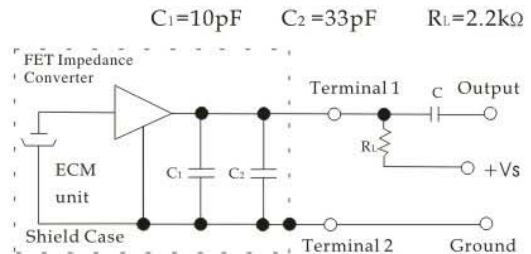


### Sensitivity Range

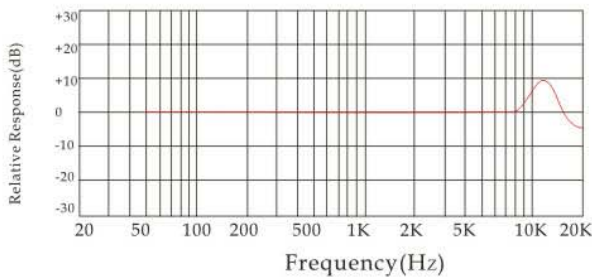
**-42 ± 4dB**

(@ 1KHz,  $V_s=2v$ ,  $R_L=2.2K\Omega$ )

### Schematic Diagram



### Typical Frequency Response Curve



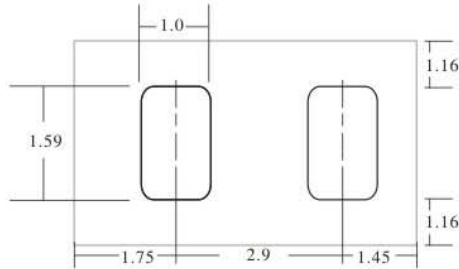
### Specification

<b>Sensitivity:</b>	See above (@ 1KHz, 0dB=1V/Pa)
<b>Directivity:</b>	Omnidirectional
<b>Output Impedance:</b>	Low impedance
<b>Current Consumption:</b>	Max. 0.5mA
<b>Standard Operation Voltage:</b>	2.0V (DC)
<b>Operation Voltage:</b>	1.5V-5.5V (DC)
<b>Sensitivity Reduction:</b>	Within-3dB at 1.5V (DC)
<b>S/N Ratio:</b>	More than 58dB (@ 1KHz, 0dB=1V/Pa)
<b>Max. Input Sound Level:</b>	At 100dB SPL. THD < 1%

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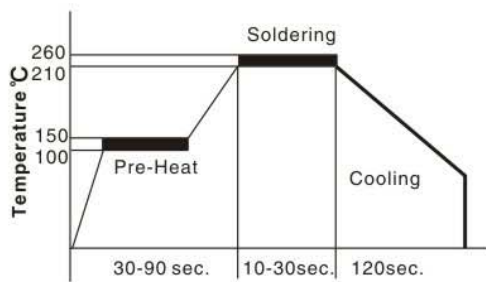
### RECOMMENDED SOLDER STENCIL PATTERN

Units: mm



(Note: Tolerance +/-0.1mm unless otherwise specified)

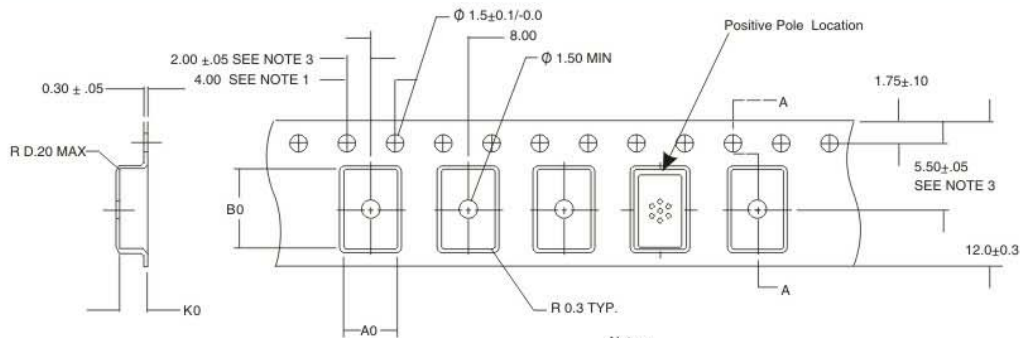
### SOLDER REFLOW PROFILE



**Notes:**

1. Maximum condition = 260 C for 30 seconds.
2. Do not pull a vacuum over the port hole of the microphone. Pulling a vacuum over the port hole can damage the device.
3. Do not board wash after the reflow process. Board washing and cleaning agents can damage the device. Do not expose to ultrasonic processing or cleaning.
4. Number of Reflow = recommend no more than 2 cycles

### PACKAGING DETAIL



SECTION A-A

A0=4.2  
B0=6.4  
K0=2.0

**Notes:**

1. 10 SPROCKET HOLE PETCH CUMULAAATEVE TOLERANCE +2
2. CAMBER IN COMPLIANCE WITH EIA 48L
3. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSIION OF POCKET, NOT POCKET HOLE

Model Number	Reel Diameter	Qty per Reel
SEM0506A	7"	1,000
SEM0506A	13"	4,000

Tape & Reel	Available in 13 and 7 diameter
Leader Length	800mm or minimum of 100 empty pockets
Label	label applied to external package and direct to reel . Per JEDEC.
Empty Units	No consecutive empty pockets;No more than 3 empty pockets per reel. (Does not include empty pockets for Leader/follower)