



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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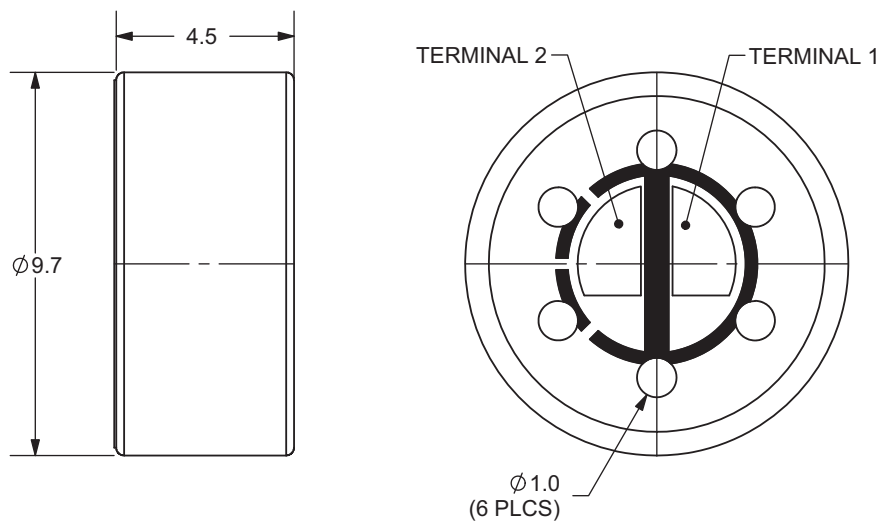
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**PART NUMBER: CMI-4537-SN69****DESCRIPTION: ELECTRET CONDENSER MICROPHONE****SPECIFICATIONS**

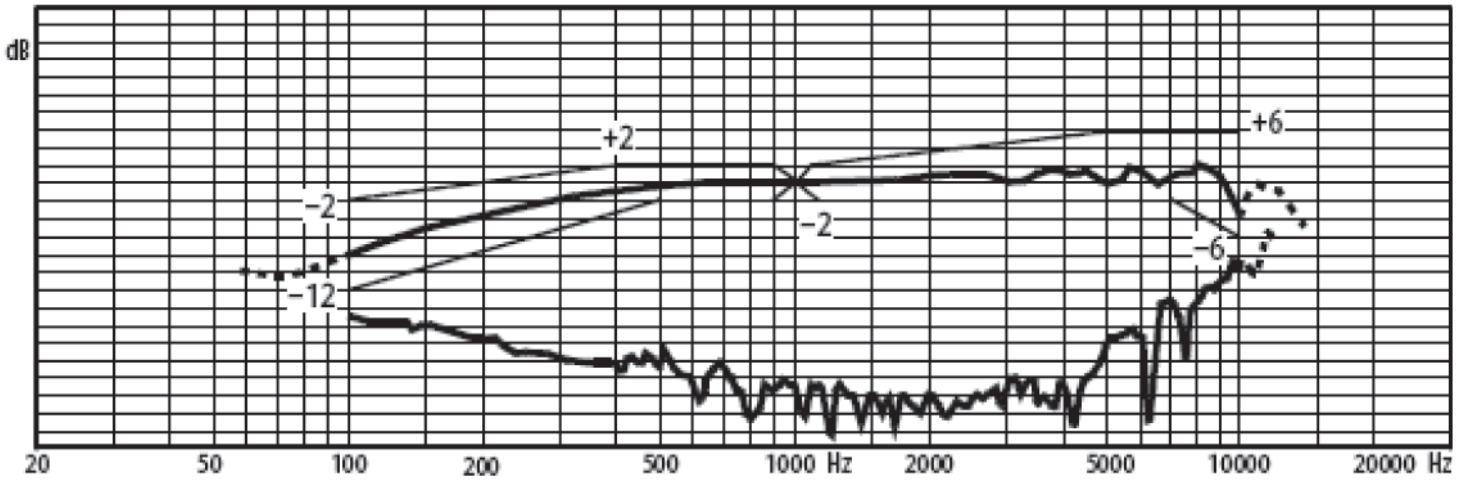
parameter	conditions/description	min	nom	max	units
directivity	unidirectional				
sensitivity	f= 1 KHz, 1Pa 0 dB= 1 V/Pa	-40	-37	-34	dB
operating voltage			1.5	9	V dc
output impedance	f= 1 KHz, 1Pa	1.26	1.8	2.34	K $\Omega$
sensitivity reduction	f= 1 KHz, 1Pa Vs=1.5 V dc to 1.1 V dc		-3		dBa
frequency		100		12,000	Hz
current consumption	Vs=1.5 V dc RL=2.0 K $\Omega$			0.4	mA
signal to noise ration	f= 1 KHz, 1 Pa A weighted		69		dBa
operating temperature		-20		70	$^{\circ}$ C
storage temperature		-20		70	$^{\circ}$ C
dimenstions	$\phi$ 9.7 x H4.5 mm				
weight				0.8	g
material	Aluminum				
terminal	terminal type				
RoHS	yes				

**APPEARANCE DRAWING**

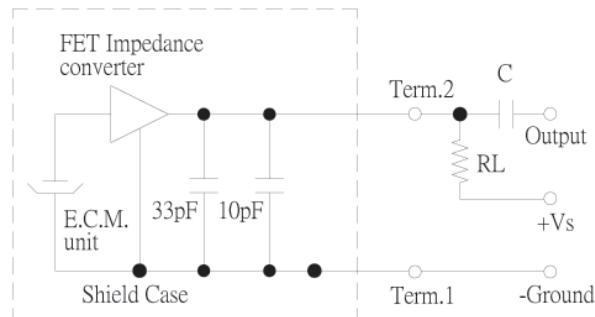
PART NUMBER: CMI-4537-SN69

DESCRIPTION: ELECTRET CONDENSER  
MICROPHONE

### FREQUENCY RESPONSE CURVE



### MEASUREMENT CIRCUIT



Schematic Diagram

**RL=2.0KΩ**



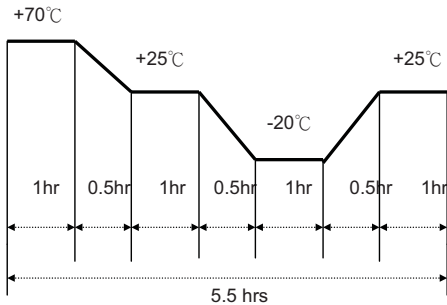
**PART NUMBER: CMI-4537-SN69**

**DESCRIPTION: ELECTRET CONDENSER MICROPHONE**

### MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
soldering heat resistance	Soldering iron with $270 \pm 5^\circ\text{C}$ should be applied on the terminal for $2 \pm 0.5$ seconds.	No interference in operation.
PCB wire pull strength	The force of 4.9 N is applied for 30 sec. to double lead wire.	No damage or cutting off.
vibration test	The microphone should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	The sensitivity should be within $\pm 3\text{dB}$ compared with the initial measurement.
drop test	The microphone without packaging is subjected to 3 drops on each axis from the height of 1 m onto a 10 mm thick wooden board.	

### ENVIRONMENT TEST

item	test condition	evaluation standard
high temperature test	After being placed in a chamber at $+70^\circ\text{C}$ for 72 hours.	The microphone will be measured after being placed at $+25^\circ\text{C}$ for 6 hours. The value of the oscillation frequency should be $\pm 10\%$ compared to the initial measurements. The SPL should be within $\pm 3\text{dB}$ compared to the initial measurements.
low temperature test	After being placed in a chamber at $-20^\circ\text{C}$ for 72 hours.	
humidity test	After being placed in a chamber at $+40^\circ\text{C}$ and $90 \pm 5\%$ RH for 240 hours.	
temperature cycle test	The part will be subjected to 10 cycles. One cycle will consist of: 	

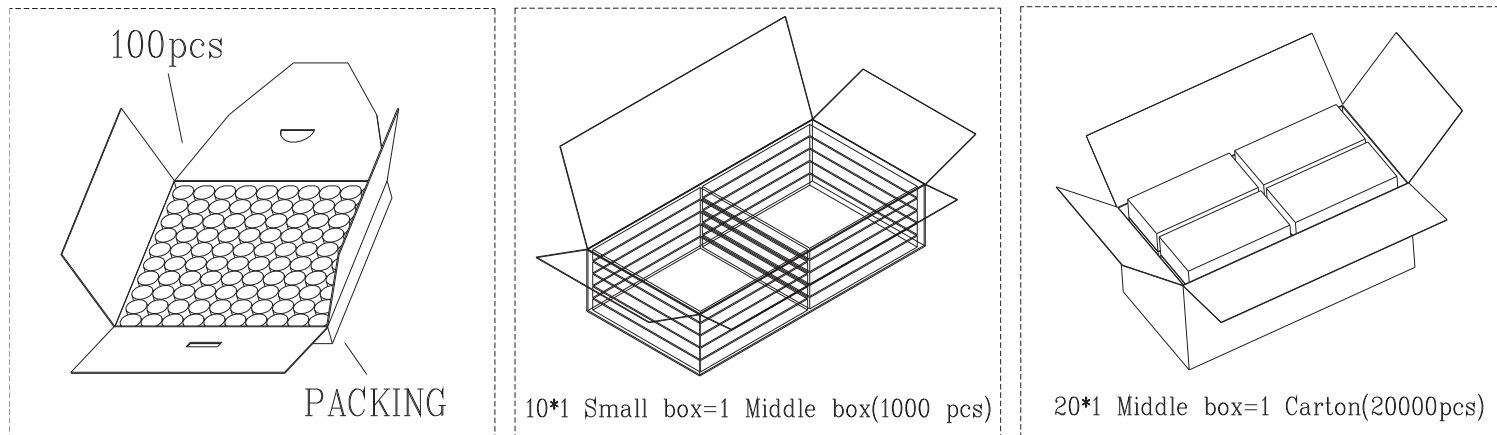
### TEST CONDITIONS

standard test conditions	a) Temperature: $+5 \sim +35^\circ\text{C}$	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: $+25 \pm 2^\circ\text{C}$	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

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**DESCRIPTION: ELECTRET CONDENSER MICROPHONE**

**PACKAGING**



1. CUI Inv.# 033-4034R  
CUI Part#. CMI-4537-SN69
2. RoHS Compliant

Small box	100mm*100mm*10mm	100PCS/Smallbox
Middle box	205mm*105mm*50mm	1000PCS/Middle box
Carton size	420mm*230mm*255mm	20000PCS/ Carton