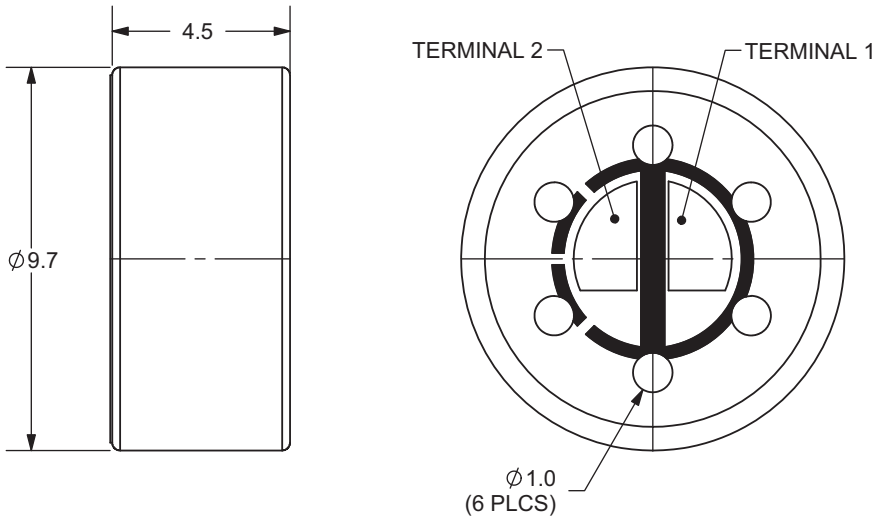
CUI INC

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	KΩ
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 KΩ			0.4	mA
signal to noise ration	f= 1 KHz, 1 Pa A weighted		69		dBA
operating temperature		-20		70	˚C
storage temperature		-20		70	˚C
dimenstions	ø9.7 x H4.5 mm				
weight				0.8	g
material	Aluminum				
terminal	terminal type				
RoHS	yes				

APPEARANCE DRAWING



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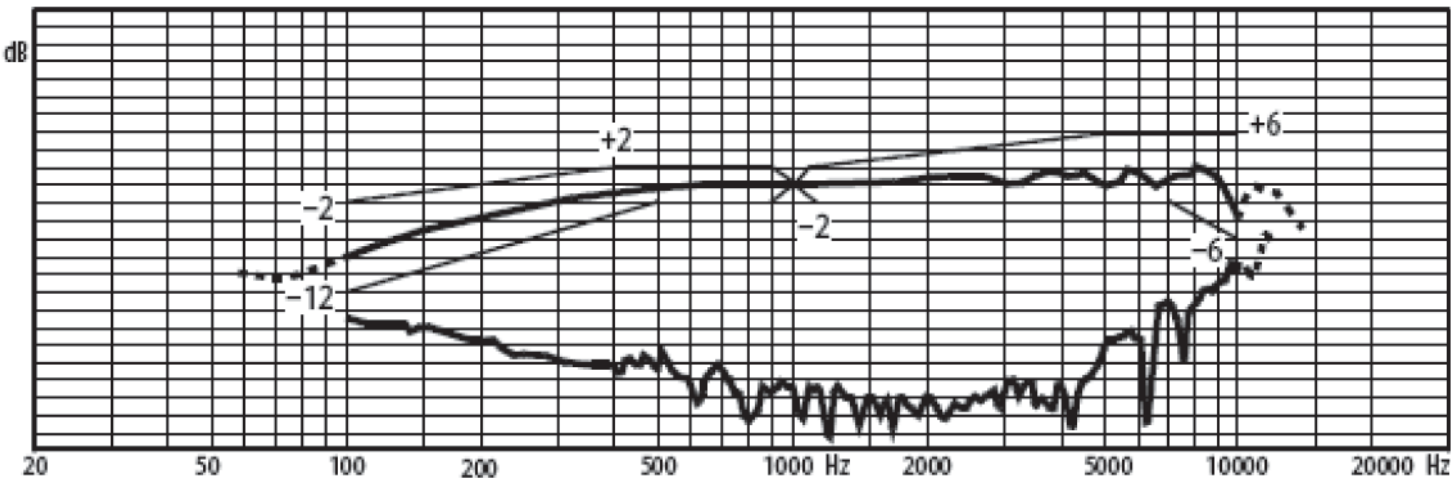
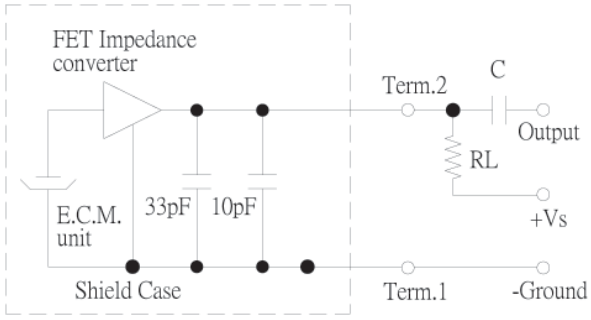
FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT



Schematic Diagram

RL=2.0KΩ

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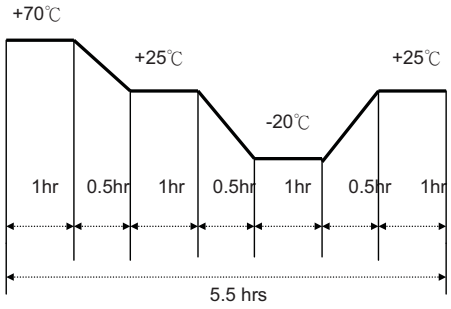
MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
soldering heat resistance	Soldering iron with 270 ±5˚C should be applied on the terminal for 2 ±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 ±3dB 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˚C for 72 hours.	The microphone will be measured after being placed at +25˚C for 6 hours. The value of the oscillation frequency should be ±10% compared to the initial measurements. The SPL should be within ±3dB compared to the initial measurements.
low temperature test	After being placed in a chamber at -20˚C for 72 hours.	
humidity test	After being placed in a chamber at +40˚C and 90 ±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 ~ +35˚C	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: +25 ±2˚C	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

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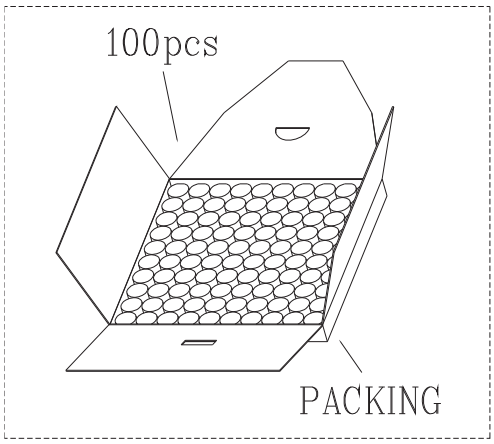
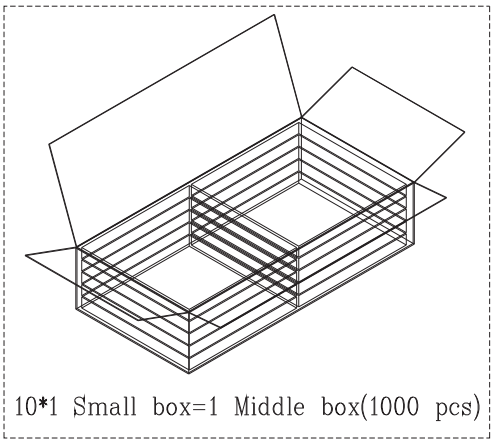
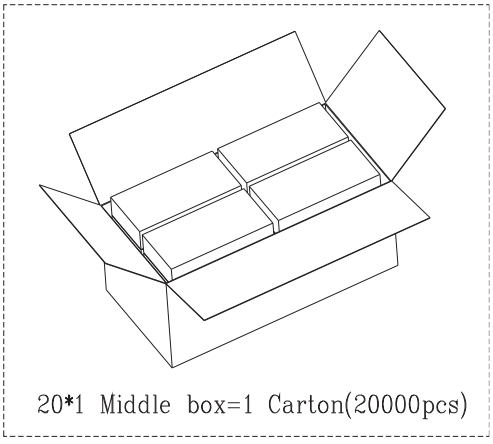
PACKAGING




10*1 Small box=1 Middle box(1000 pcs)


20*1 Middle box=1 Carton(20000pcs)

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

CUI Inc.:
CMI-4537-SN69