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PART NUMBER: CMA-6542PF **DESCRIPTION:** electret condenser microphone

SPECIFICATIONS

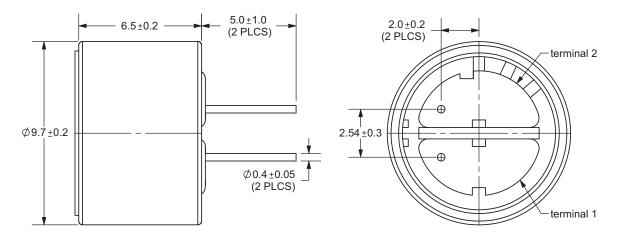
directivity	omnidirectional		
sensitivity (S)	-42 ±3 db	f = 1KHz, 1Pa 0dB = 1V/Pa	
sensitivity reduction (ΔS-Vs)	-3 dB	f = 1KHz, 1Pa Vs = 4.5 ~ 1.5 V dc	
operating voltage	4.5 V dc (standard), 10 V	dc (max.)	
output impedance (Zout)	2.2 ΚΩ	f = 1KHz, 1Pa	
operating frequency (f)	20 ~ 20,000 Hz		
current consumption (IDSS)	0.5 mA max.	$Vs = 4.5 V dc RL = 2.2K\Omega$	
signal to noise ratio (S/N)	60 dBA	f = 1KHz, 1Pa A-weighted	
operating temperature	-20 ~ +70° C		
storage temperature	-20 ~ +70° C		
dimensions	ø9.7 x 6.5 mm		
weight	0.70 g max.		
material	Al		
terminal	pin type (hand soldering only)		
RoHS	yes		

note:

We use the "Pascal (Pa)" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20dB compared to the "ubar" indication. Example: -60dB (0dB = 1V/ubar) = -40dB (1V/Pa)

APPEARANCE DRAWING

tolerances not shown: ±0.3mm

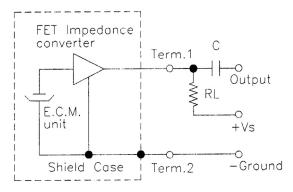




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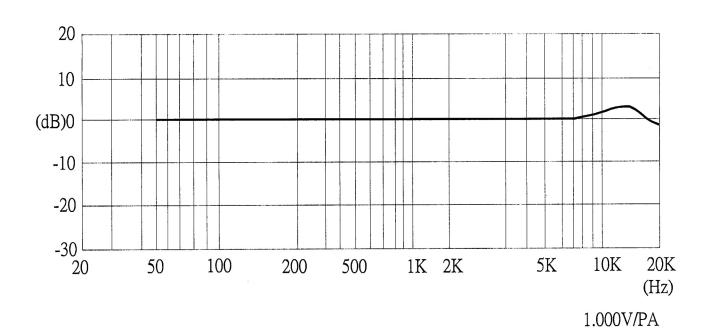
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MEASUREMENT CIRCUIT



Schematic Diagram $RL=2.2K\Omega$

FREQUENCY RESPONSE CURVE





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MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard	
soldering heat resistance	Lead terminals are immersed in solder bath of 260 ±5°C for 2 ±0.5 seconds.	No interference in operation.	
terminal mechanical strength	Apply to the terminal 0.5kg for 1 minute	No damage or cutting off.	
vibration	The part will be measured after applying a vibration amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	After any tests, the sensitivity should be within ±3dB compared	
drop test	The part will be dropped from a height of 1 m onto a 20 mm thick wooden board 3 times in 3 axes (X, Y, Z) for a total of 9 drops.	to the initial measurement.	

ENVIRONMENT TEST

item	test condition	evaluation standard
high temp. test	After being placed in a chamber at +70°C for	The part will be measured after
	72 hours.	
low temp. 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% relative humidity for 240 hours.	
temp. cycle test	The part shall be subjected to 10 cycles. One	
	cycle will consist of:	
	+70℃	being placed at +25°C for 6 hours. After any tests, the
	+25°C +25°C -20°C	sensitivity should be within ±3dE compared to the initial measurement.
	1hr 0.5hr 1hr 0.5hr 1hr 0.5hr 1hr	
	*·····································	
	5.5 hrs	

TEST CONDITIONS

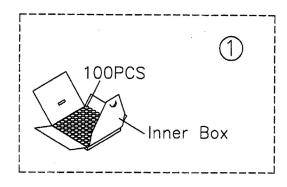
standard test condition a) temperature: $+5 \sim +35^{\circ}$ C b) humidity: 45 - 85% c) pressure: 860-1060 mbar judgement test condition a) temperature: $+25 \pm 2^{\circ}$ C b) humidity: 60 - 70% c) pressure: 860-1060 mbar

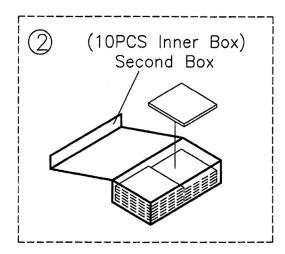


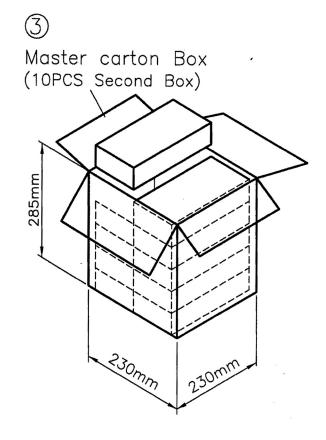
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PACKAGING







Inner Box			1x100PCS
Second Box		202mmx103mmx50mm	100PCSx10
Master carton	Вох	230mmx230mmx285mm	1000PCSx10