

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!



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PART NUMBER: CMC-2742WBL-25L **DESCRIPTION:** electret condenser microphone

SPECIFICATIONS

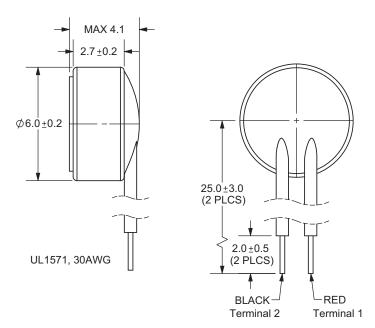
directivity	omnidirectional		
sensitivity (S)	-42 ±3 dB	f = 1KHz, 1Pa OdB = 1V/Pa	
sensitivity reduction (ΔS-Vs)	-3 dB	f = 1KHz, 1Pa Vs = 2.0 ~ 1.5 V dc	
operating voltage	2 V dc (standard), 10	V dc (max.)	
output impedance (Zout)	2.2 ΚΩ	f = 1KHz, 1Pa	
operating frequency (f)	100 ~ 20,000 Hz		
current consumption (IDSS)	0.5 mA max.	$Vs = 2.0 V dc RL = 2.2K\Omega$	
signal to noise ratio (S/N)	57 dBA	f = 1KHz, 1Pa A-weighted	
operating temperature	-20 ~ +70° C		
storage temperature	-20 ~ +70° C		
dimensions	ø6.0 x 2.7 mm		
weight	0.22 g max.		
material	Al		
terminal	wire type (hand soldering only)		
RoHS	yes		
dustproof and waterproof level	IP57		

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





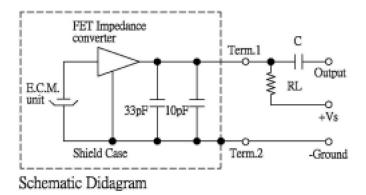
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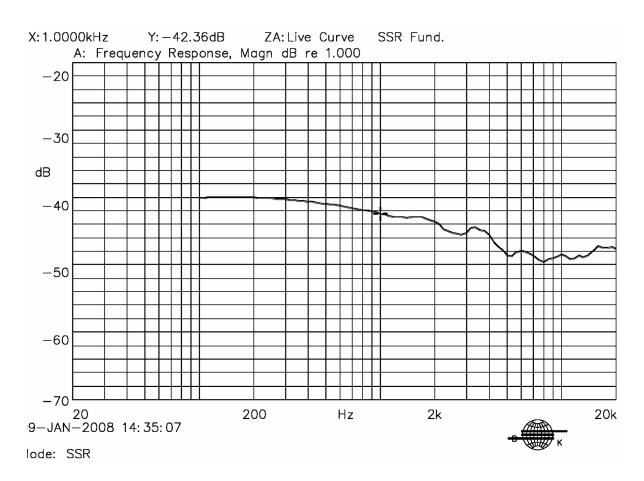
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MEASUREMENT CIRCUIT

 $RL = 2.2K\Omega$



FREQUENCY RESPONSE CURVE





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MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
solderability	Stripped wires of lead wires are immersed in	90% min. stripped wires will be
(connector excepted)	rosin for 5 seconds and then immersed in a	wet with solder.
	solder bath of 270 ±5°C for 3 ±0.5 seconds.	(except the edge of the terminal)
lead wire pull strength	The pull force will be applied to double lead	
	wire:	No damage or cutting off.
	Horizontal 4.9N (0.5kg) for 30 seconds	
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	After any tests, the sensitivity
	3 perpendicular directions for 2 hours.	should be within ±3dB compared
drop test	The part will be dropped from a height of	to the initial measurement.
	1 m onto a 20 mm thick wooden board 3 times	
	in 3 axes (X, Y, Z) for a total of 9 drops.	

ENVIRONMENT TEST

item	test condition	evaluation standard
high temp. test	After being placed in a chamber at +70°C for 72 hours.	
low temp. test	After being placed in a chamber at -20°C for 72 hours.	The part will be measured after being placed at +25°C for 6 hours. After any tests, the sensitivity should be within ±3dB compared to the initial measurement.
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°C +25°C -20°C 1hr 0.5hr 1hr 0.5hr 1hr 0.5hr 1hr	

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

