

DESCRIPTION: electret condenser microphone

SPECIFICATIONS

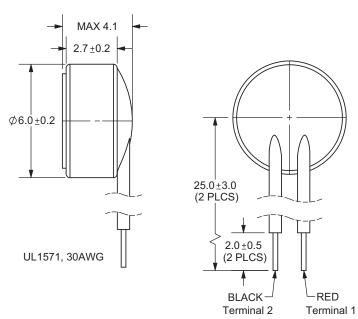
directivity	omnidirectional		
sensitivity (S)	-42 ±3 dB	f = 1KHz, 1Pa 0dB = 1V/Pa	
sensitivity reduction (Δ S-Vs)	-3 dB	f = 1KHz, 1Pa Vs = 2.0 ~ 1.5 V dc	
operating voltage	2 V dc (standard), 10	V dc (max.)	
output impedance (Zout)	2.2 ΚΩ	f = 1KHz, 1Pa	
operating frequency (f)	100 ~ 20,000 Hz		
current 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

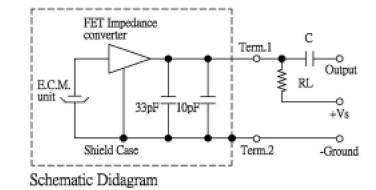




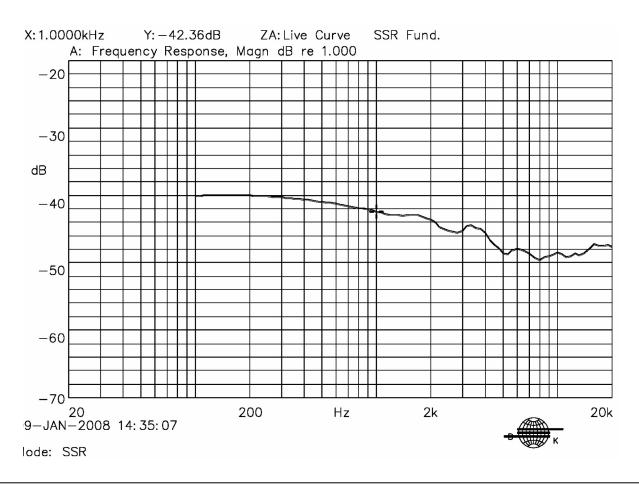
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MEASUREMENT CIRCUIT

 $RL = 2.2K\Omega$



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	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°C +25°C +25°C 1hr 0.5hr 1hr 0.5hr 1hr 0.5hr 1hr	being placed at +25°C for 6 hours. After any tests, the sensitivity should be within ±3dB compared to the initial measurement.
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TEST CONDITIONS

standard test condition judgement test condition

a) temperature: +5 ~ +35°C a) temperature: +25 ±2°C b) humidity: 45 - 85% b) humidity: 60 - 70%

c) pressure: 860-1060 mbar c) pressure: 860-1060 mbar



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PACKAGING

