

page 1 of 4

date 10/2010

PART NUMBER: CMP-5247TF-K **DESCRIPTION:** electret condenser microphone

SPECIFICATIONS

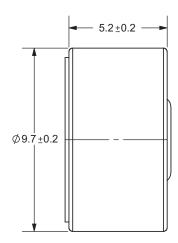
directivity	noise-canceling	
sensitivity (S)	-47 ±3 dB	f = 1KHz, 1Pa 0dB = 1V/Pa
sensitivity reduction (∆S-Vs)	-3 dB	f = 1KHz, 1Pa Vs = 1.5 ~ 1.0 V dc
operating voltage	1.5 V dc (standard), 10 V dc (max.)	
output impedance (Zout)	2.2 kΩ	f = 1KHz, 1Pa
operating frequency (f)	100 ~ 20,000 Hz	
current consumption (IDSS)	0.5 mA max.	$Vs = 1.5 V dc RL = 680\Omega$
signal to noise ratio (S/N)	58 dBA	f = 1KHz, 1Pa A-weighted
operating temperature	-20 ~ +70° C	
storage temperature	-20 ~ +70° C	
dimensions	ø9.7 x 5.2 mm	
weight	0.75 g max.	
material	Al	
terminal	terminal type (hand soldering only)	
RoHS	yes	

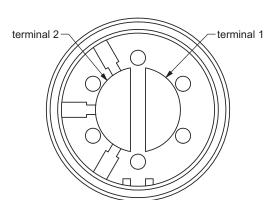
note:

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





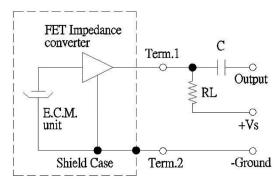


page 2 of 4

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MEASUREMENT CIRCUIT

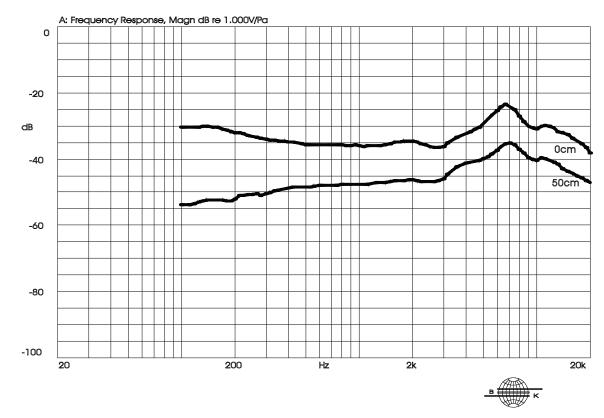


Schematic Diagram

C=0.1 μ F RL=680 Ω +Vs=1.5V

FREQUENCY RESPONSE CURVE

X:1.0000kHz Y:-47.00dB ZA:Live Curve SSR Fund.





page 3 of 4

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MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
soldering heat resistance Soldering iron of 270 ±5°C should be placed on		No interference in operation.
-	the terminal for 2 ±0.5 seconds.	
PCB 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 should be within ±3dB compared
	3 perpendicular directions for 2 hours.	
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.	
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:	The part will be measured after
	+70℃	being placed at +25°C for 6 hours. After any tests, the
	+25°C +25°C	sensitivity should be within ±3dB 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 ~ +35°C b) humidity: 45 - 85% c) pressure: 860-1060 mbar judgement test condition a) temperature: +25 ±2°C b) humidity: 60 - 70% c) pressure: 860-1060 mbar

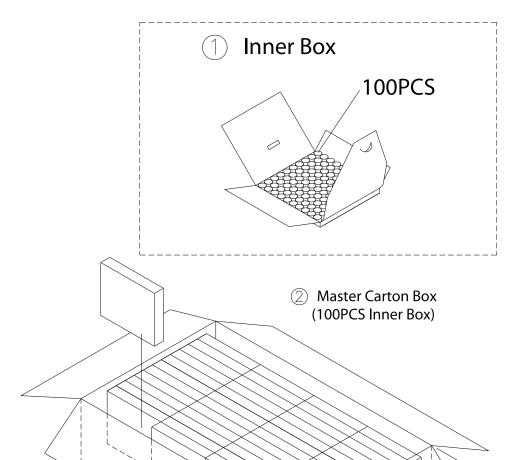


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page 4 of 4 **date** 10/2010

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PACKAGING



Inner Box	100mmx100mmx18mm	1x100PCS=100PCS
Master Carton Box	425mmx265mmx110mm	100PCSx100=10,000PCS

265mm

425mm