

# AT-CUT CRYSTAL UNIT (SMD • Metal-can Type)

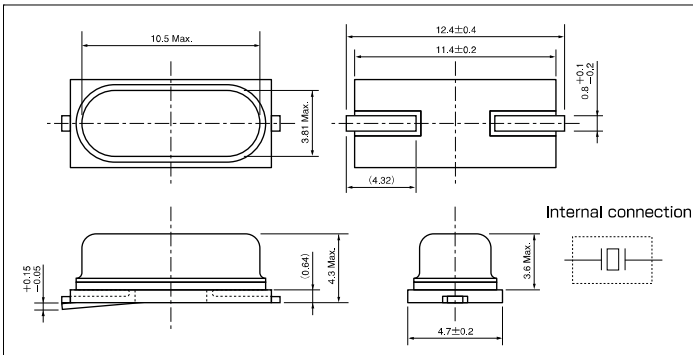
RoHS compliant **HCM49** 1000pcs/reel



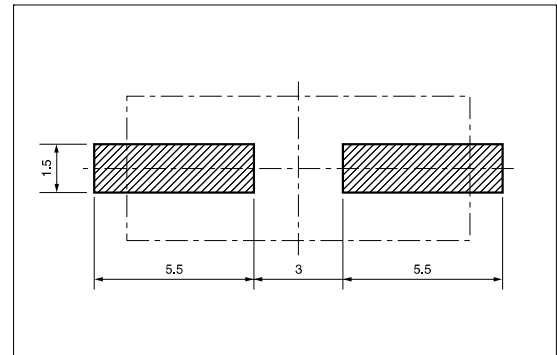
## FEATURES

- Surface mount type of metal-can HC-49/U-S. High performance with the resistance weld sealing.
- Suitable for various applications such as communication devices, AV devices and measuring instruments.

## DIMENSION [mm]



## SOLDER PAD LAYOUT [mm]



## STANDARD SPECIFICATIONS

Item	Model	HCM49	Conditions
Nominal Frequency	f <sub>0</sub>	3.5MHz~30.0MHz (Fundamental)	Need to contact us for the available frequency
		30.0MHz~50.0MHz (3rd Overtone)	
Frequency Tolerance	Δ f/f <sub>0</sub>	±30ppm	at 25°C
Frequency Tolerance over Operating Temperature Range	Δ f/f <sub>0</sub>	below 6.0MHz:±50ppm	-10°C~+60°C
		above 6.0MHz:±30ppm	
Operating Temperature Range	T <sub>OPR</sub>	-40°C~+85°C	
Storage Temperature Range	T <sub>STR</sub>	-55°C~+125°C	
Motional (series) resistance	R <sub>1</sub>	Refer to the following table	at 25°C
Load capacitance	C <sub>L</sub>	Fundamental:10.0pF~∞ 3rd Overtone:5.0pF~∞	Need to specify your requirement
Shunt capacitance	C <sub>0</sub>	7.0pF Max.	
Level of drive	DL	100 μW	
Insulation Resistance	I <sub>R</sub>	500MΩ Min.	DC100V±15V
Aging (first year)	Δ f/f <sub>0</sub>	±5ppm Max.	25°C±3°C

## MOTIONAL (SERIES) RESISTANCE (R<sub>1</sub>)

Frequency Range	3.5MHz≤f <sub>0</sub> <4.0MHz	4.0MHz≤f <sub>0</sub> <6.0MHz	6.0MHz≤f <sub>0</sub> <10MHz	10MHz≤f <sub>0</sub> <14MHz	14MHz≤f <sub>0</sub> <30MHz	30MHz≤f <sub>0</sub> <36MHz	36MHz≤f <sub>0</sub> ≤50MHz
Mode	Fundamental	Fundamental	Fundamental	Fundamental	Fundamental	3rd Overtone	3rd Overtone
R <sub>1</sub>	200 Ω Max.	150 Ω Max.	100 Ω Max.	80 Ω Max.	50 Ω Max.	140 Ω Max.	100 Ω Max.