

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

RoHS compliant

## HCM49

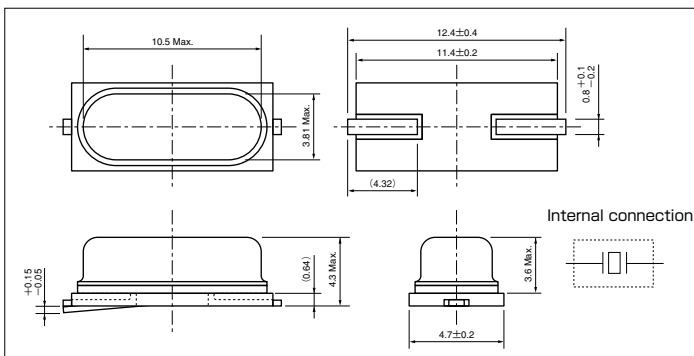
1000pcs/reel



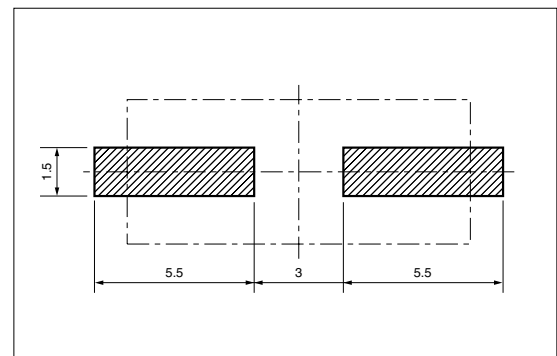
### FEATURES

- 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 ± 3V
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.