

# 49MJ SURFACE-MOUNT CRYSTAL

## FEATURES

- High Precision availability
- Wide Frequency Range
- One day delivery
- Applications: Telecommunication equipment, ...

13.5 x 11.0 x 5.3 mm U-version

11.0 x 11.0 x 5.3 mm T-version



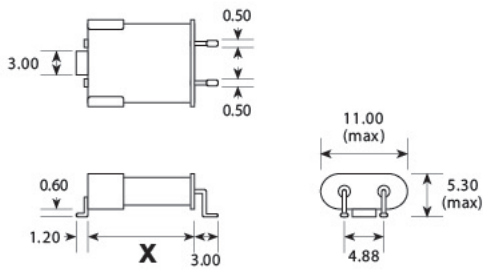
Parameters	Symbol	Specification
Frequency Range	Fo	1.8432 MHz ~ 200 MHz
Operation Mode		1.8432 MHz + Fundamental (see options) 20.0 MHz ~ 100.0 MHz 3rd-overtone (see options) 50.0 MHz ~ 160.0 MHz 5th-overtone (see options) 80.0 MHz ~ 200.0 MHz 7th-overtone (see options)
Operating temperature Range	To	0° to +70°C (see options)
Frequency Tolerance at 25°C	Δf/F	± 10ppm standard (see options)
Temperature Stability	Δf/F	± 10ppm standard (see options)
Load Capacitance (CL)	CL	series or 5 pF to 100 pF (see options)
Equivalent Series Resistance	ESR	Frequency dependent, please consult factory
Shunt Capacitance (Co)	Co	7pF Max
Insulation Resistance	Ri	500 MΩ min. (at 100Vdc)
Drive Level	DL	3 mW max.
Aging	Δf/F	±5ppm max (at 25°C, first year)
Packing Unit		1000pcs / reel
Soldering Condition		260°C , 10 sec x2 max
		<b>Customer specifications on request</b>

## OPTIONS & ORDERING INFORMATION

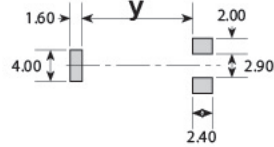
Version	Freq. Tolerance	Freq. Stability*	Operating Temp.*	Load Capacitance	Mode	Frequency in MHz	ESR if custom required
<b>U</b> = 13.5 mm	<b>05</b> = ±5 ppm	<b>05</b> = ±5 ppm	<b>D</b> = -10° / +60°C	Please specify CL in <b>pF</b> or <b>S</b> for Series	<b>F</b> = Fundamental	Please specify the frequency in MHz	Specify a value in Ω
<b>T</b> = 11.0 mm	<b>10</b> = ±10 ppm	<b>10</b> = ±10 ppm	<b>E</b> = 0° / +70°C		<b>D</b> = 3rd overtone		
	<b>15</b> = ±15 ppm	<b>15</b> = ±15 ppm	<b>F</b> = -20° / +70°C		<b>V</b> = 5th overtone		
	<b>20</b> = ±20 ppm	<b>20</b> = ±20 ppm	<b>G</b> = -30° / +75°C		<b>Z</b> = 7th overtone		
	<b>25</b> = ±25 ppm	<b>25</b> = ±25 ppm	<b>H</b> = -30° / +85°C				
	<b>30</b> = ±30 ppm	<b>30</b> = ±30 ppm	<b>K</b> = -40° / +85°C				
	<b>50</b> = ±50 ppm	<b>50</b> = ±50 ppm					

\* Note : Not all combinations are possible , please consult us.

## OUTLINE DIMENSIONS



SOLDER PAD LAYOUT



case	x
49U MJ	13.46 mm
49T MJ	11.0 mm

case	y
49U MJ	14.00 mm
49T MJ	11.50 mm