



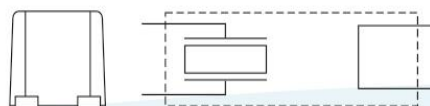
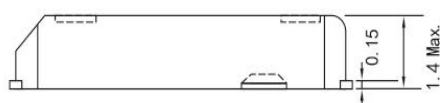
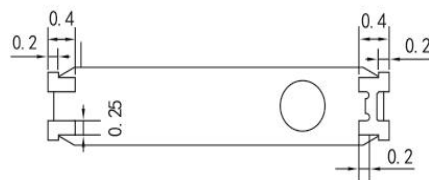
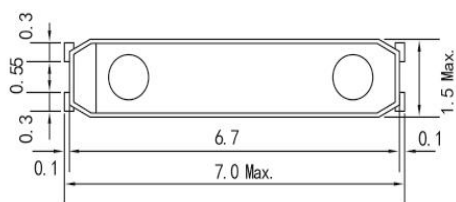
Features

- > Plastic mold package incorporated tubular type quartz crystal.
- > Suitable for automatic and high density surface mounting.
- > Excellent shock and heat resistance.
- > Multi dimension for choose.
- > Reasonable cost.
- > Contains high melting temperature type solder (Pb 85%) exempted by RoHS directive.

Electrical Specifications

Item	Symbol	MC-146	Remark
Nominal Frequency Range	F	32.768 KHz	Fundamental
Temperature	Storage	TSTG -55 °C to +125 °C	Store as bare product after unpacking
	Operating	TOPR -40 °C to +85 °C	Specified Equivalent series must be satisfied
Recommended drive level	DL	1.0 μ W	
Frequency tolerance	$\Delta f/f$	± 20 ppm	Ta= +25 °C, DL=0.1 μ W
Turnover temperature	OT	+25, +/-5 °C	
Temperature coefficient (frequency)	a	-0.04 ppm /°C ² Max	
Load capacitance	CL	12.5pF	
Series resistance	R1	65 k Ω Max	-20 °C to +70 °C, DL=100 μ W
Motional Capacitance	C1	1.9 fF type	
Shunt Capacitance	C0	0.8 pF Max	
Insulation resistance	IR	500 M Ω Min	
Aging	fa	± 3 ppm /year Max	Ta=+25 °C +/- 3, first year
Sh°Ck resistance	S.R	± 5 ppm Max	100g dummy drop from 1500mmheight on to the concrete 3 directions 10 times

Dimensions



Units:mm