

kHz RANGE CRYSTAL UNIT LOW PROFILE SMD

FC-13F

- Frequency range : 32.768 kHz
- Thickness : 0.6 mm Max.
- Overtone order : Fundamental
- Applications : Small communications devices



Actual size

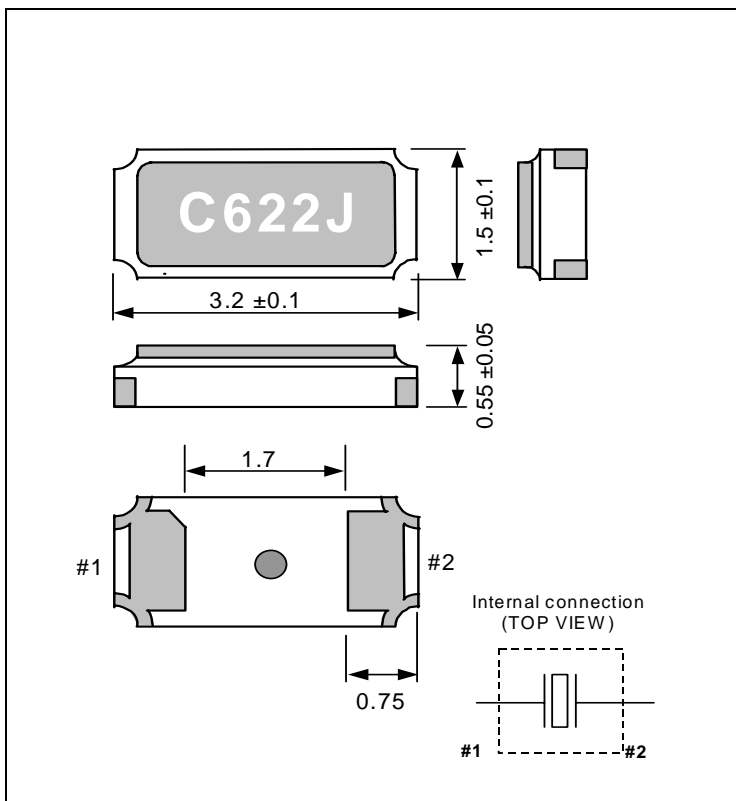


Specifications (characteristics)

Item	Symbol	Specifications	Remarks	
Nominal frequency range	f	32.768 kHz	Please contact us for inquiries regarding available frequencies.	
Temperature range	Storage temperature	T_stg	-55 °C to +125 °C	Store as bare product after unpacking
	Operating temperature	T_use	-40 °C to +85 °C	
Level of drive	DL	0.5 μW Max.		
Frequency tolerance (standard)	f_tol	$\pm 20 \times 10^{-6}$	+25 °C, DL=0.1 μW Please ask tighter for tolerance	
Turnover temperature	Ti	+25 °C ± 5 °C		
Parabolic coefficient	B	$-0.04 \times 10^{-6} / \text{°C}^2$ Max.		
Load capacitance	CL	7 pF, 9 pF, 12.5 pF	Please specify	
Motional resistance (ESR)	R1	80 kΩ Max.		
Motional capacitance	C1	3.3 fF Typ.		
Shunt capacitance	C0	1.0 pF Typ.		
Frequency aging	f_age	$\pm 3 \times 10^{-6} / \text{year}$ Max.	+25 °C, First year	

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

