

kHz RANGE CRYSTAL UNIT LOW PROFILE SMD

FC-135 / FC-145 FC-255

- Frequency range : 32.768 kHz (32 kHz to 100 kHz)
- Thickness : 0.8 mm Typ.
- Overtone order : Fundamental
- Applications : Small communications devices



Actual size

FC-135

FC-145

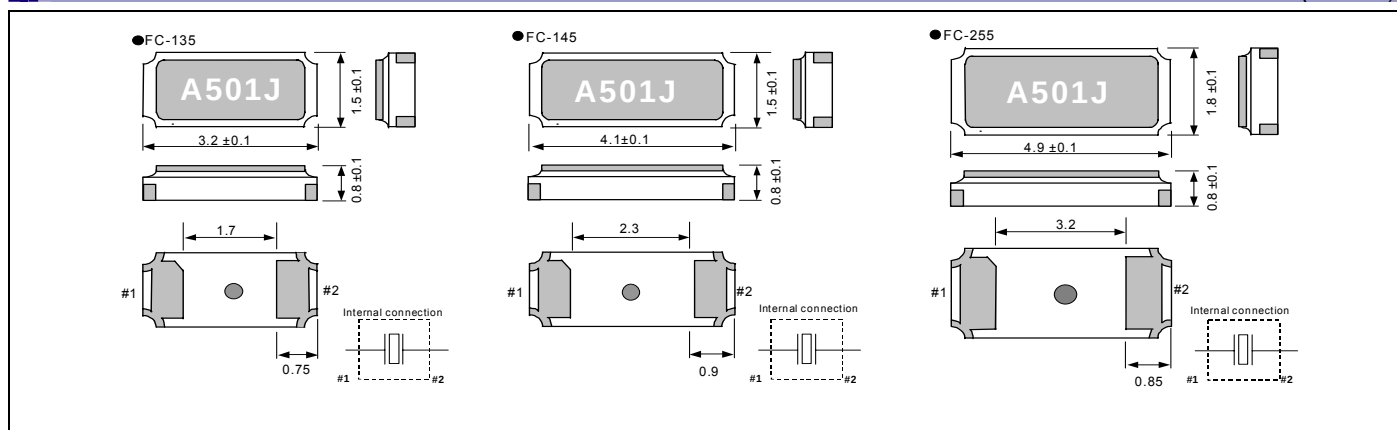
FC-255

Specifications (characteristics)

Item		Symbol	Specifications				Remarks
			FC-135 / 145	FC-255	FC-135	FC-255	
Nominal frequency range		f	32.768 kHz		32 kHz to 77.5 kHz	32 kHz to 100 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	±20 × 10 ⁻⁶			±50 × 10 ⁻⁶ ±100 × 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 × 10 ⁻⁶ / °C ² Max.				
Load capacitance		CL	9 pF, 12.5 pF	7 pF, 12.5 pF	9 pF, 12.5 pF	7 pF, 12.5 pF	Please specify
Motional resistance (ESR)		R ₁	70 kΩ Max.	65 kΩ Max.	70 kΩ to 45 kΩ	70 kΩ to 30 kΩ	
Motional capacitance		C ₁	3.4 fF Typ.	2.0 fF Typ.	3.7 fF to 1.6 fF	2.3 fF to 0.6 fF	
Shunt capacitance		C ₀	1.0 pF Typ.	1.3 pF Typ.	1.3 pF to 0.5 pF	1.7 pF to 0.9 pF	
Frequency aging		f_age	±3 × 10 ⁻⁶ / year Max.				+25 °C, First year

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

