

# Tuning Fork Quartz Crystals

**G4**


8.0 x 3.8mm SMD Plastic Molded Tuning Fork Crystal

## Product Features

- Rugged, plastic-molded, resistant to shock and vibration
- Excellent resistance to heat shock and environmental characteristics
- Ideally suited for automated pick-and-place assembly environments
- Available on tape & reel; 16mm tape; 3000 units per reel
- RoHS/Green Compliant

## Product Description

The G4 Series is a 32.768 kHz tuning fork type quartz crystal mounted in a plastic-molded package.

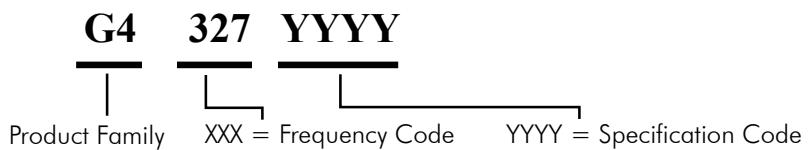
## Applications

- Real-time clocks
- Reference for microprocessors' low power and standby modes.

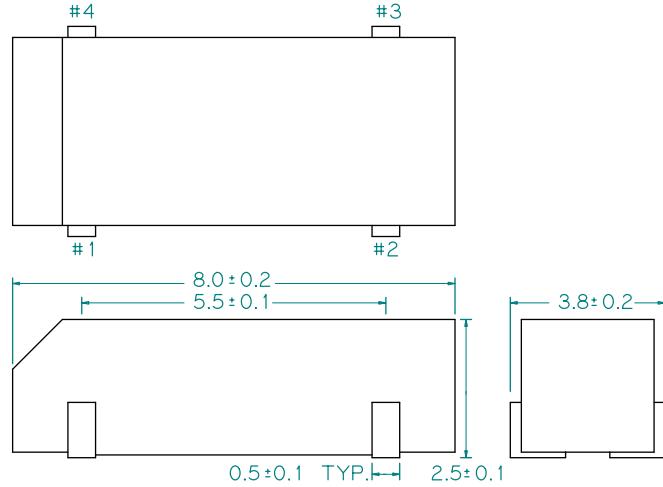
## Electrical Specification:

Nominal Frequency	f	32.768 kHz
Frequency Tolerance at 25°C		±20ppm
Turnover Temperature	T <sub>0</sub>	25°C±5°C
Temperature Coefficient	K	-0.035ppm/°C <sup>2</sup> Typical
Load Capacitance	C <sub>L</sub>	12.5pF standard
Equivalent Series Resistance	R <sub>S</sub>	50KΩ max
Shunt Capacitance	C <sub>0</sub>	1.3pF typical
Drive Level	DL	1μW max
Aging (1st year @25°C±3°C)		±5.0ppm max
Operating Temperature Range		-40 to +85°C
Storage Temperature Range		-55 to +125°C
Reflow Temperature		260°C max, 10 Second

## Part Ordering Information:

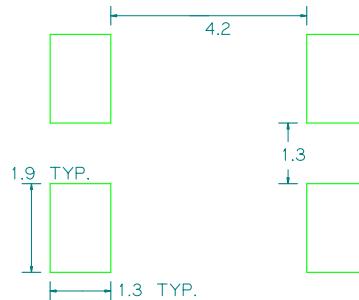


## Mechanical Drawings: G4 Series

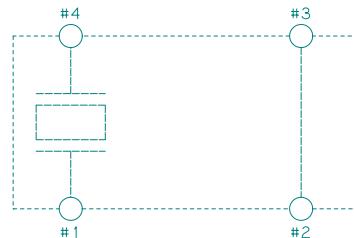


**UNIT: mm**

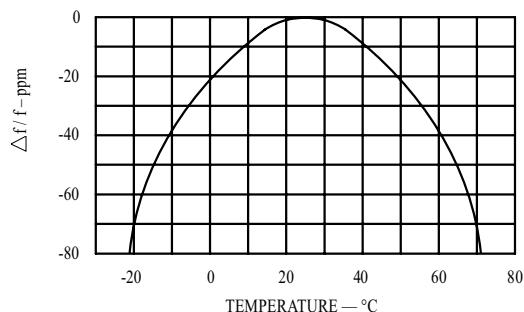
## Land Pattern Example



## Crystal Pin Connection



## Typical Temperature Characteristic:



Frequency Deviation at Temperature T  

$$\Delta f/f = K(T_0 - T)^2$$