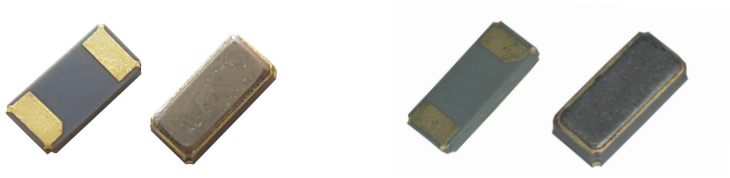
THE DATASHEET OF

G8327A038

Tuning Fork Quartz Crystals

G8



3.2 x 1.5mm SMD Ceramic Molded Tuning Fork Crystal

Product Features

- Rugged, ceramic-molded, resistant to shock and vibration
- Excellent resistence to heat shock and environmental characteristics
- Ideally suited for automated pick-and-place assembly environments
- Available on tape & reel; 12mm tape; 3000 units per reel
- Pb-free and RoHS/Green Compliant

Product Description

The G8 Series is a 32.768 kHz tuning fork type quartz crystal mounted in a ceramic-molded package.

Applications

- Real-Time Clocks
- Reference for Microprocessors' Low Power and Standby Modes
- Time Display Devices
- Smart Meters
- POS
- Networking

Electrical Specification:

Nominal Frequency	f	32.768 kHz
Frequency Tolerance at 25°C		±20ppm, ±10ppm
Turnover Temperature	T_0	25°C±5°C
Temperature Coefficient	K	-0.03 +/- 0.01ppm/°C^2 Typical
Load Capacitance	C_L	7.0 pF, 9.0 pF, 12.5 pF (1)
Equivalent Series Resistance	R_S	70KΩ max
Shunt Capacitance	C_0	1.8pF max
Motional Capacitance	C_1	6.5fF typical
Drive Level	DL	0.5μW max.
Operating Temperature Range		-40 to +85°C
Storage Temperature Range		-55 to +125°C
Reflow Temperature		260°C max, 10 Seconds

Note:
1. Other capacitance values are avaiable. Please contact Diodes sales.

Part Ordering Information:

G8 327 X YYY

- G8 — Product Family
- 327 — Frequency Code
- X — 0 = Drawing 1, A = Drawing 2
- YYY — Specification Code

A product Line of Diodes Incorporated

G8 Series Quartz Crystal
32.768 kHz SMD Crystal | 3.2 x 1.5mm

Package: (Scale: none; dimensions are in mm)

Figure 1

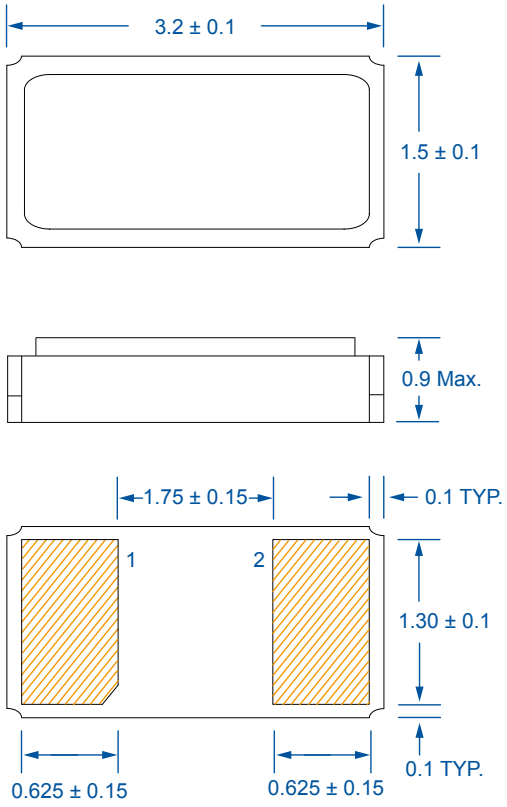
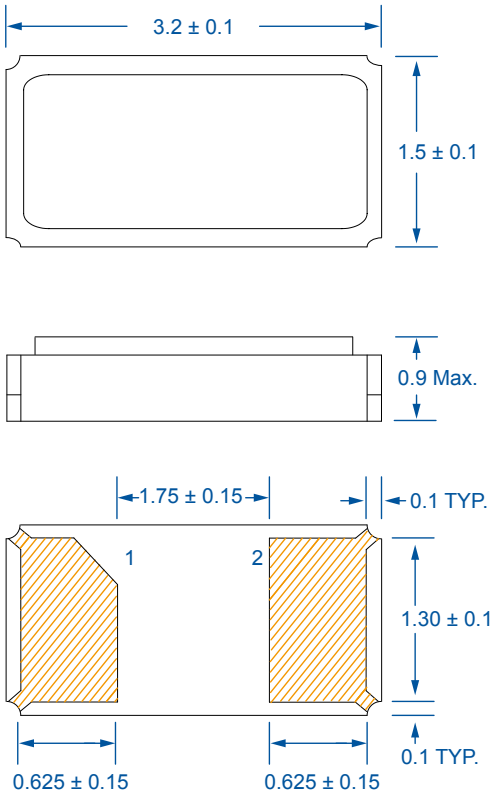
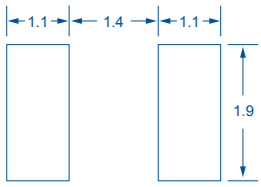


Figure 2



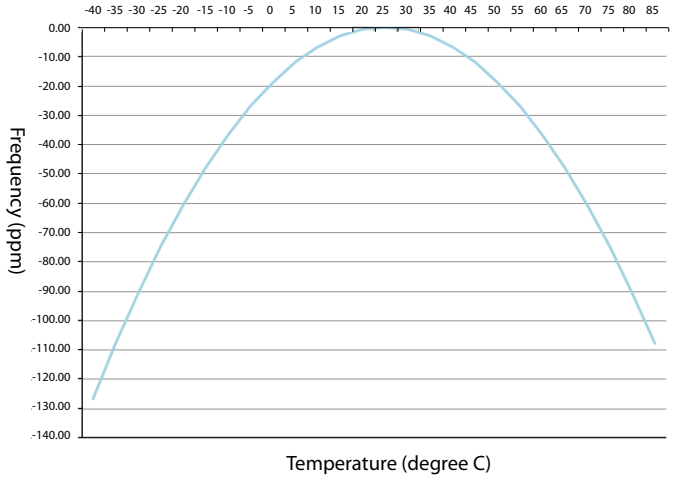
Recommended Land Pattern:



Pin Functions:

Pin	Function
1	Xtal
2	Xtal

Typical Temperature Characteristic:



Frequency Deviation at Temperature T

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

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