



# 7.9 x 3.7 x 2.4mm SMD

32.768kHz

- Frequency range 30.0kHz to 100.0kHz
- Industry-standard package
- **Compact and low-profile**
- Supplied on EIA tape and reel







### **DESCRIPTION**

95SMX(G) crystals are miniature surface-mount crystals specifically designed to provide a low-cost and reliable source of real time clock frequency, 32.768kHz for mass-market applications, and also frequencies in the range 30kHz to 100kHz. The parts are low-profile, and of low mass. The package is encapsulated in epoxy resin.

SPECIFICATION 32.7680kHz and Nominal Frequency: 30.000kHz to 100.00kHz Calibration Tolerance at 25°C: ±20 ppm, ±30 ppm,  $\pm 50$  ppm (std.) and  $\pm 100$  ppm 12.5pF typical Load Capacitance (CL): Equivalent Series Resistance (ESR):  $50k\Omega$  max. 1.0 μW max. Drive level: +25°±5°C Turnover Temperature: Temperature Coefficient: -0.034/°C2 (Parabolic function) Q: 50,000 minimum **Shunt Capacitance:** 0.8 to 1.7pF Motional Capacitance: 0.001 to 0.004pF Capacitance Ratio: 330 to 800 Ageing (first year):  $\pm 5$ ppm max. at 25°  $\pm 3$ °C Insulation Resistance: 500MΩ minimum @100VDC Crystal Cut: XY-Cut -40° to +85°C Operating Temperature Range: Storage Temperature Range: -55° to +125°C ±5 ppm max. Shock Resistance: Vibration Resistance: ±5 ppm max. IR Reflow Resistance: ±10ppm max. Reflow Condition: 10 seconds max. at 250° ±10°C

Package

Outer Package: **Plastic** 

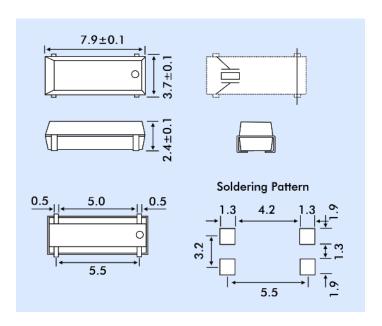
Sealing: Press fit (2x6mm built-in) Copper Alloy (CuSN) **Terminal Lead Frame:** 

**Terminal Plating:** SnCu

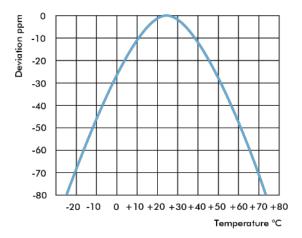
**Delivery Format:** EIA tape and reel, 3k pieces/reel

RoHS Status: Compliant

#### **OUTLINE & DIMENSIONS**



# STABILITY OVER TEMPERATURE **XY-Cut Crystal**



## PART NUMBER AND SPECIFICATION

