

# 32.768kHz SMD 8.7 x 3.8 x 2.5mm

- Frequency 32.768kHz
- Inductry-standard package
- Compact and low-profile
- Supplied on EIA tape and reel

## **DESCRIPTION**

90SMX(N) crystals are miniature surface-mount crystals specifically designed to provide a low-cost and reliable source of real time clock 32.768kHz frequency fro mass-marlet applications. The crystals are low-profile and encapsulated in epoxy resin.

### **SPECIFICATION**

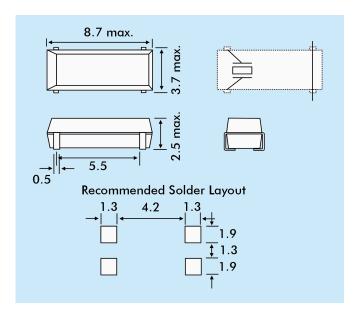
0. 2007011	
Nominal Frequency:	32.7680kHz
Calibration Tolerance at 25°C:	±20ppm
Load Capacitance (CL):	12.5pF*
Equivalent Series Resistance (ESR):	50k Ohms
Drive level:	1.0 microW max.
Q:	50,000 minimum
Temperature Coefficient:	-0.035±0.008ppm/°C2 (Parabolic)
Turnover Temperature:	+25°±5°C
Shunt Capacitance:	1.35pF typical
Ageing:	±5ppm max. in first year at 25°C
Insulation Resistance:	500M Ohm minimum @100VDC
Crystal Cut:	X-Cut
Operating Temperature Range:	-40° to +85°C
Storage Temerature Range:	-55° to +125°C
Reflow Soldering:	10s maximum at 260°C twice
	or 180s at 230°C, once.
Shock:	±5ppm max, free drops x3 from
	75cm height onto hard wood
	surface.
Packaging:	EIA tape and reel, 3k pieces/reel
RoHS Status:	Compliant

<sup>\*</sup> Other CL (I.e CL = 6pF) is available, check with Euroquartz.





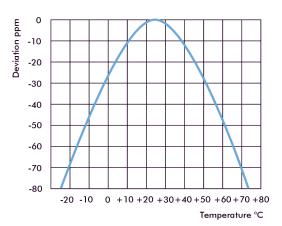
#### **OUTLINE & DIMENSIONS**



#### PART NUMBER AND SPECIFICATION

Order stock number: PH32768X for 32.768kHz  $\pm 20$ ppm, 12.5pF

# STABILITY OVER TEMPERATURE X-Cut Crystal



EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 Email: info@euroquartz.co.uk www.euroquartz.co.uk