

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



DESCRIPTION

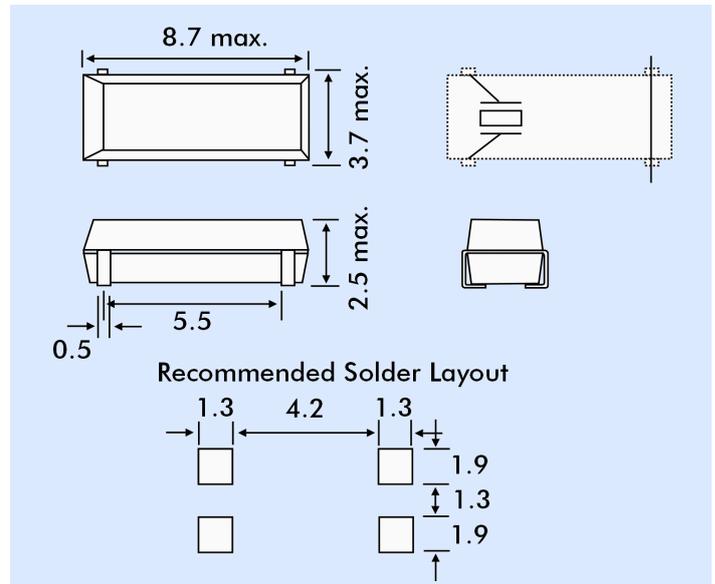
90SMX(N) crystals are miniature surface-mount crystals specifically designed to provide a low-cost and reliable source of real time clock 32.768kHz frequency for mass-market applications. The crystals are low-profile and encapsulated in epoxy resin.

SPECIFICATION

| | |
|-------------------------------------|---|
| 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 µW max. |
| Q: | 50,000 minimum |
| Temperature Coefficient: | -0.035±0.008ppm/°C ² (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 Temperature 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 |

* Other CL (I.e CL = 6pF) is available, check with Euroquartz.

OUTLINE & DIMENSIONS



PART NUMBER AND SPECIFICATION

Order stock number: PH32768X for 32.768kHz ±20ppm, 12.5pF

STABILITY OVER TEMPERATURE X-Cut Crystal

