

AG CRYSTALS 7.0mm x 1.5mm x 1.4mm

DESCRIPTION

AG crystals are ultra-miniature surface-mount crystals specifically designed to provide 32.768kHz for real-time clocks and 75kHz frequencies. With their ultra-small size and rugged construction they are ideal for battery-powered, hand held miniature equipment applications.

FEATURES

- Frequencies 32.7680kHz and 75.0kHz
- Ultra-miniature size 7.0 x 1.5 x 1.4mm (height)
- Low mass and rugged construction
- Supplied on tape and reel

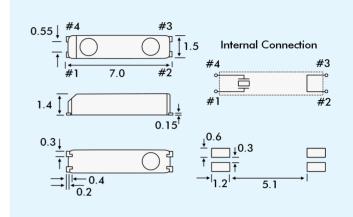
GENERAL SPECIFICATION

| Nominal Frequency: | 32.7680kHz and 75.0kHz | | |
|-----------------------------------|---|--|--|
| Calibration Tolerance at 25°C: | ± 20 ppm or ± 50 ppm (standard) | | |
| Load Capacitance (CL): | 12.5pF standard or 7pf | | |
| Equivalent Series Resistance (R1) | | | |
| 32.768kHz: | 65kW | | |
| 75.0kHz: | 30kW | | |
| Drive Level: | 1.0mW max., 0.5mW operating | | |
| Temperature Coefficient: | -0.04ppm/°C ² | | |
| Peak Temperature: | +25°C±5°C | | |
| Shunt Capacitance (CO): | 0.8pF typical | | |
| Motional Capacitance (C1): | 1.9fF typical | | |
| Ageing at 25°C: | ±3ppm maximum, first year | | |
| Insulation Resistance: | 500MW minimum @100VDC | | |
| Crystal Cut: | X-Cut | | |
| Operating Temperature Range: | -40° to 85°C | | |
| Storage Temperature Range: | -55° to +125°C | | |
| Reflow Soldering: | 10s maximum @+260°C, twice | | |
| | or <230°C for 3 minutes. | | |
| Packaging: | 16mm EIA Tape and Reel | | |
| | 3000 pieces per reel. | | |
| | | | |

PART NUMBERS

| Frequency (kHz) | Load Capacitance | Part Number | Tolerance ±ppm/ Temp. Range °C | ESR Max. (W) |
|--------------------|---------------------|----------------|-----------------------------------|-----------------|
| 32.768 | 12.5pF | PH32768P | $\pm 20/-40+85$ | 65k |
| 32.768 | 7pF | PH32768Q | $\pm 20/-40+85$ | 65k |
| 75.000 | 12.5pF | PH75000R | $\pm 20/-40+85$ | 30k |

OUTLINES AND DIMENSIONS



STABILITY/TEMPERATURE PERFORMANCE

