

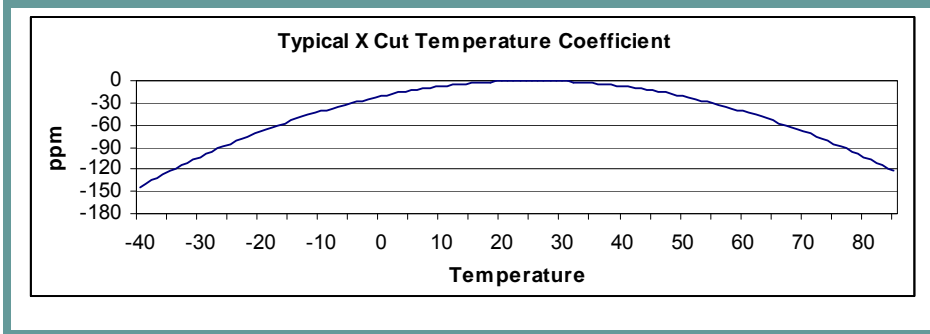
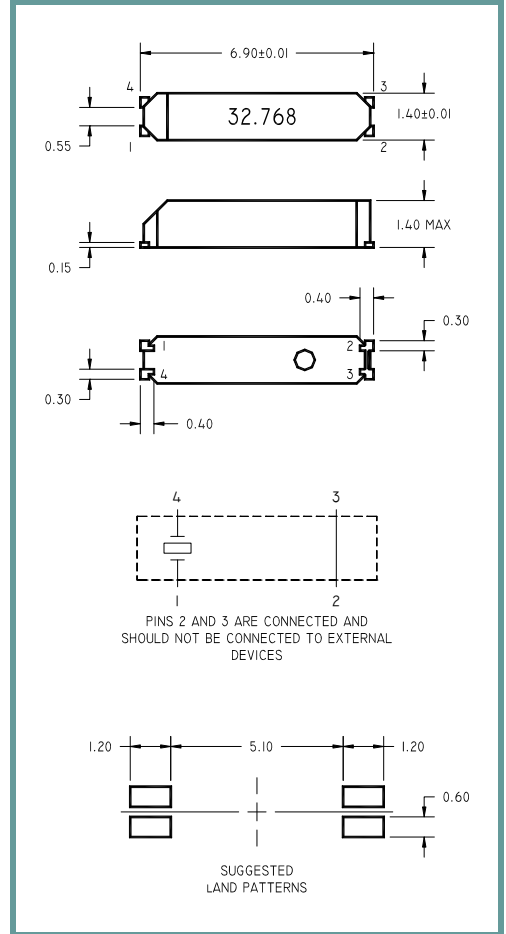
Product Features:

Low Cost SMD Package
Low ESR
Compatible with Leadfree Processing

Applications:

Fibre Channel
Server & Storage
Sonet /SDH
802.11 / Wifi
T1/E1, T3/E3

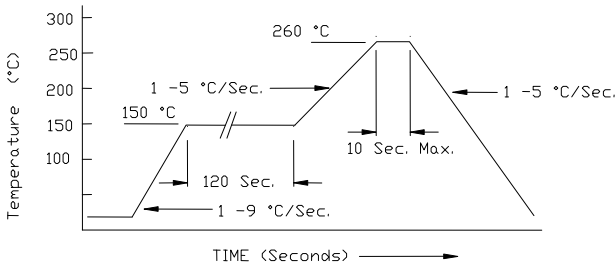
| | |
|--------------------------------------|---|
| Frequency | 32.768 kHz |
| ESR (Equivalent Series Resistance) | 65 kΩ Max. |
| Shunt Capacitance (C0) | 1.8 pF Typical |
| Frequency Tolerance @ 25° C | ±20 ppm Standard |
| Frequency Stability over Temperature | Parabolic -0.034 ppm / ° C ² Typ. Turnover +25°C ±5° C. See graph below. |
| Crystal Cut | X Cut |
| Load Capacitance | 6.0 pF, 9.0 pF or 12.5 pF |
| Drive Level | 1 uW Max. |
| Aging | ±5 ppm Max. / Year |
| Operating | -40° C to +85° C |
| Storage | -40° C to +85° C |



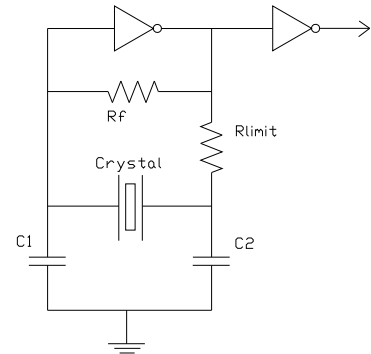
| Part Number Guide | | Sample Part Number: IL3R - HX5F12.5 - 32.768 KHz | | | | |
|-------------------|-------------------------------------|--|-----------------------------|-----------------|-------------------------------------|--------------|
| Package | Tolerance (ppm) at Room Temperature | Stability (ppm) over Operating Temperature | Operating Temperature Range | Mode | Load Capacitance (pF) | Frequency |
| IL3R - | H = ±20 ppm | X = X Cut | 5 = -40°C to +85°C | F = Fundamental | 12.5 pF (Standard). 9 pF 6 pF | - 32.768 kHz |

Pb Free Solder Reflow Profile:

Typical Circuit:



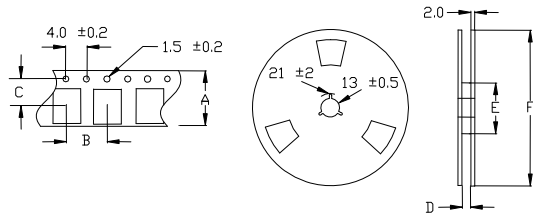
*Units are backward compatible with 240C reflow processes



Package Information:

MSL = 1
Termination = e1 (Sn/Cu/Ag over Ni over Kovar base metal)

Tape and Reel Information:



| Quantity per Reel | 3000 |
|-------------------|--------------|
| A | 16 +/- .3 |
| B | 4.0 +/- .2 |
| C | 7.5 +/- .2 |
| D | 17.5 +/- 1.5 |
| E | 60 |
| F | 180 |

Environmental Specifications

| | |
|------------------------------|--|
| Thermal Shock | MIL-STD-883, Method 1011, Condition A |
| Moisture Resistance | MIL-STD-883, Method 1004 |
| Mechanical Shock | MIL-STD-883, Method 2002, Condition B |
| Mechanical Vibration | MIL-STD-883, Method 2007, Condition A |
| Resistance to Soldering Heat | J-STD-020C, Table 5-2 Pb-free devices (except 2 cycles max) |
| Hazardous Substance | Pb-Free / RoHS / Green Compliant |
| Solderability | JESD22-B102-D Method 2 (Preconditioning E) |
| Terminal Strength | MIL-STD-883, Method 2004, Test Condition D |
| Gross Leak | MIL-STD-883, Method 1014, Condition C |
| Fine Leak | MIL-STD-883, Method 1014, Condition A2, R1=2x10 ⁻⁸ atm cc/s |
| Solvent Resistance | MIL-STD-202, Method 215 |

Marking

Line 1: 32.768

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