4 Pad Plastic Package, 1.4 mm x 7 mm

IL3R Series

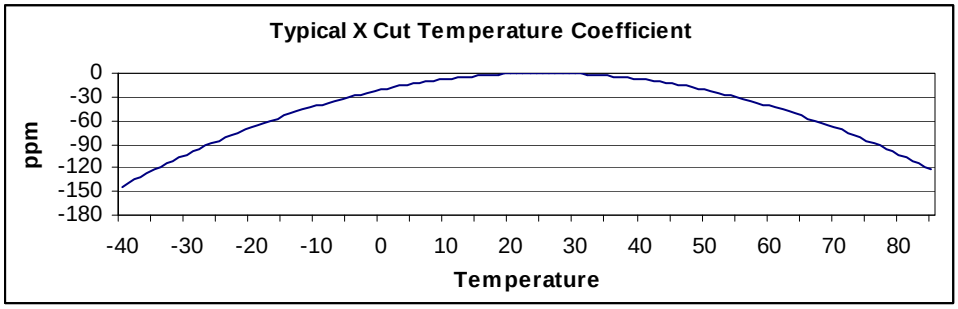
## Product Features:

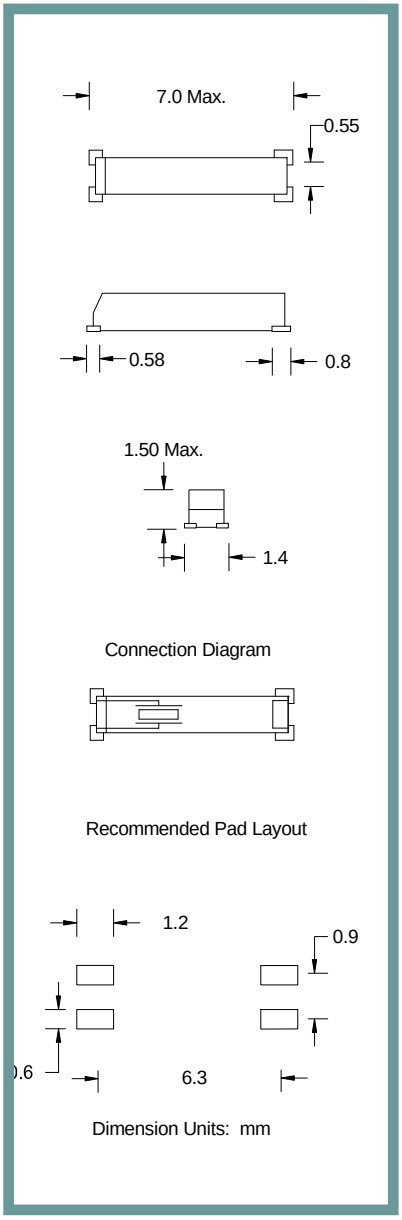
Low Cost SMD Package
Low ESR
Compatible with Leadfree Processing

## 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)** | 1.2 pF Typical |
| **Frequency Tolerance @ 25° C** | ±20 ppm Standard |
| **Frequency Stability over Temperature** | Parabolic -0.034 ppm / ° $C^2$ Typical. Inflection point approx. 27° C. See graph below. |
| **Crystal Cut** | X Cut |
| **Load Capacitance** | 12.5 pF Standard |
| **Drive Level** | 1 uW Max. |
| **Aging** | ±5 ppm Max. / Year Standard |
| **Temperature** | |
| **Operating** | -40° C to +85° C Standard |
| **Storage** | -40° C to +85° C Standard |



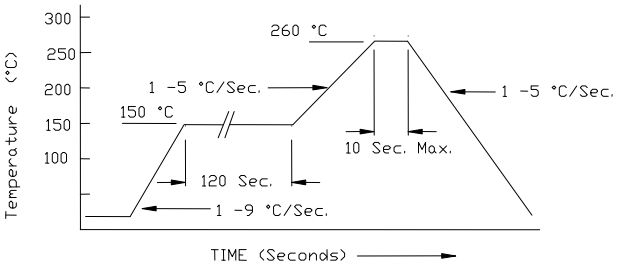




| Part Number Guide | Sample Part Number: | IL3R - HX5F12.5 - 32.768 kHz | | | | |
|---|---|---|---|---|---|---|
| **Package** | **Tolerance (ppm) at Room Temperature** | **Stability (ppm) over Operating Temperature** | **Operating Temperature Range** | **Mode (overtone)** | **Load Capacitance (pF)**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

4 Pad Plastic Package, 1.4 mm x 7 mm

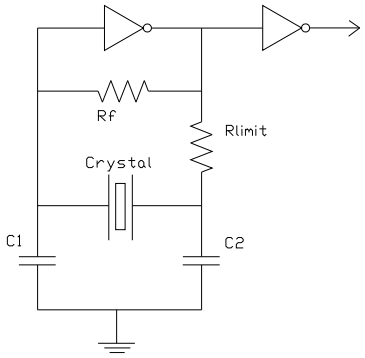
IL3R Series

**Pb Free Solder Reflow Profile:**




*Units are backward compatible with 240C reflow processes

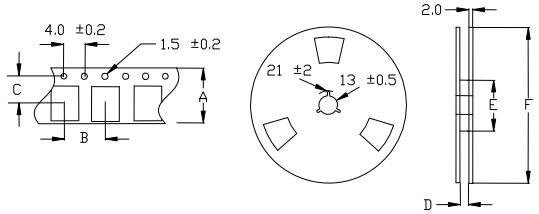
**Typical Circuit:**




## Package Information:

MSL = 2a
Termination = e1 (Sn/Cu/Ag over Ni over Kovar base metal)

## Tape and Reel Information:




| Quantity per Reel | 3000 |
|---|---|
| A | 16 +/-.3 |
| B | 8 +/-.2 |
| C | 7.5 +/-.2 |
| D | 17.5 +/-1.5 |
| E | 50 / 60 / 80 |
| F | 180 / 250 |

## 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: Date Code(yww), Factory Code