2 Pad Ceramic Base SMD Crystal, 2.0 mm x 1.2 mm

IL3T Series

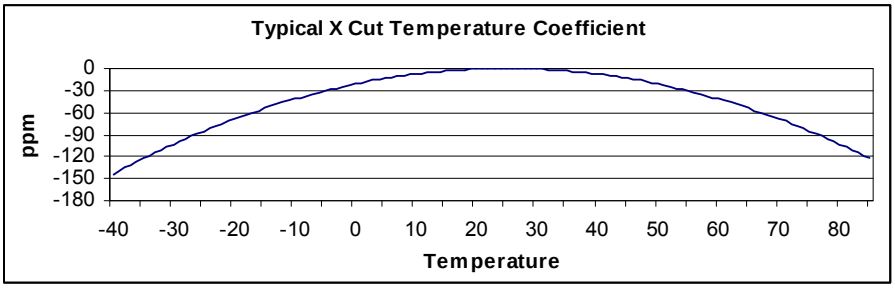
Product Features:

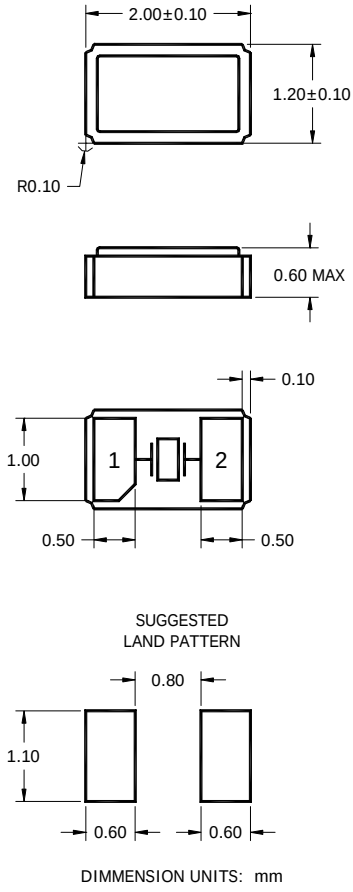
- Low Cost SMD Package
- RoHS Compliant
- Compatible with Leadfree Processing
- Ultra Low Profile

Applications:

- Real Time Clocks
- Metering
- Industrial Control
- Time Reference

Frequency	32.768 KHz
ESR (Equivalent Series Resistance)	Less than 90 kΩ
Shunt Capacitance (C0)	1.3 pF Typ.
Motional Capacitance (Cl)	6.5 fF Typ.
Frequency Tolerance @ 25° C ±5ºC	±20 ppm Standard
Frequency Stability over Temperature	Parabolic -0.034 ppm / ° C^2 Typ. Turnover point +25º ±5ºC See Graph Below
Crystal Cut	X-Cut
Load Capacitance	12.5 pF Standard
Drive Level	0.1 µW Typ., 0.5 µW Max.
Aging	±5 ppm Max. / Year Standard
Temperature	
Operating	-40° C to +85° C Standard
Storage	-55° C to +125° C Standard





Part Number Guide **Sample Part Number: IL3T - HX5F12.5 - 32.768 KHz**

Package	Stability (ppm) at Room Temperature	Stability (ppm) over Operating Temperature	Operating Temperature Range	ode (overtone)	Load Capacitance (pF)	Frequency
IL3T -	H = ±20 ppm	X = X Cut	5 = -40°C to +85°C	F = Fundamental	12.5 pF Standard	- 32.768 KHz

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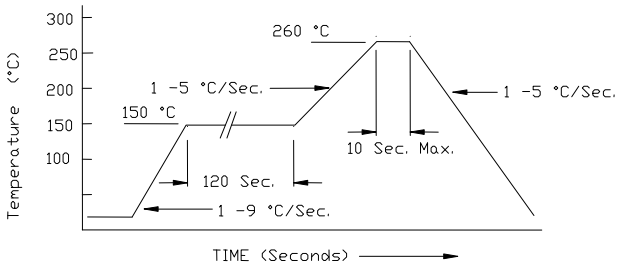
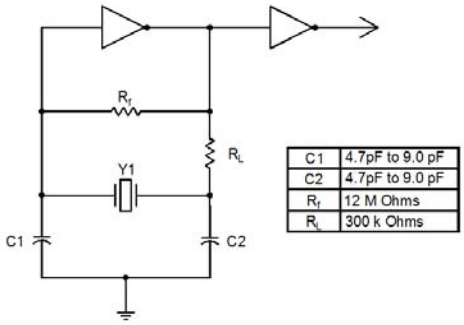
Pb Free Solder Reflow Profile:



*Units are backward compatible with 240C reflow processes

Typical Circuit:

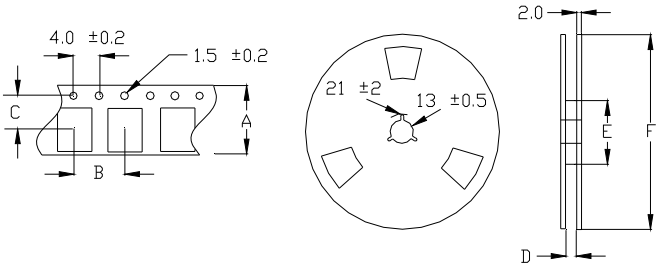


C1	4.7pF to 9.0 pF
C2	4.7pF to 9.0 pF
R_f	12 M Ohms
R_L	300 k Ohms

Package Information:

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

Tape and Reel Information:



Quantity per Reel	3000
A	8.0 ±0.2
B	4.0 ±0.1
C	3.5 ±0.05
D	9.0 ±0.3
E	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: Frequency, Date Code