



6.0 +/-0.2

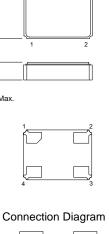
3.5 +/-0.2

1.1 Max

Product Features: Low Cost SMD Package Low Profile Package Compatible with Leadfree Processing

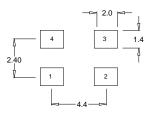
Applications: Fibre Channel Server & Storage Sonet /SDH 802.11 / Wifi T1/E1, T3/E3 System Clock

Frequency	8 MHz to 100 MHz		
ESR (Equivalent Series Resistance) 8 MHz – 48 MHz 36 MHz – 100.0 MHz (3 rd O.T.)	60 Ω Max. 60 Ω Max.		
Shunt Capacitance (C0)	7 pF Max.		
Frequency Tolerance @ 25° C	± 30 ppm Standard (see Part Number Guide for more options)		
Frequency Stability over Temperature	±50 ppm Standard (see Part Number Guide for more options)		
Crystal Cut	AT Cut		
Load Capacitance	18 pF Standard (see Part Number Guide for more options)		
Drive Level	500 uW Max.		
Aging	±5 ppm Max. / Year Standard		
Temperature			
Operating	0° C to +70° C Standard (see Part Number Guide for more options)		
Storage	-40° C to +85° C Standard		





Recommended pad layout



Dimension Units: mm

Part Number Guid	e	Sample Part Number	ILCX08 - FB1F	18 - 20.000		
Package	Tolerance (ppm) at Room Temperature	Stability (ppm) over Operating Temperature	Operating Temperature Range	Mode (overtone)	Load Capacitance (pF)	Frequency
	$B = \pm 50 \text{ ppm}$	B = ±50 ppm	0 = 0°C to +50°C	F = Fundamental	18 pF Standard. Or Specify	- 20.000 MHz
ILCX08 -	F = ±30 ppm	F = ±30 ppm	1 = 0°C to +70°C	$3 = 3^{rd}$ overtone		
	G = ±25 ppm	G = ±25 ppm	2 = -10°C to +60°C			
	$H = \pm 20 \text{ ppm}$	H = ±20 ppm	3 = -20°C to +70°C			
	l = ±15 ppm	l = ±15 ppm**	5 = -40°C to +85°C			
	J = ±10 ppm*	J = ±10 ppm**	9 = -10°C to +50°C			

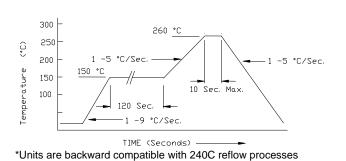
* Not available at all frequencies. ** Not available for all temperature ranges.

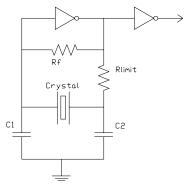






Pb Free Solder Reflow Profile:



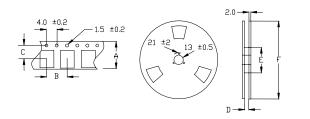


Typical Circuit:

Package Information:

MSL = 1 Termination = e4 (Au over Ni over W base metal).

Tape and Reel Information:



Quantity per Reel	1000		
Α	16 +/3		
В	8 +/2		
C	7.5 +/2		
D	17.5 +/-1		
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: ILSI, Date Code (yww) Line 2: Frequency