

ILCX19 Series



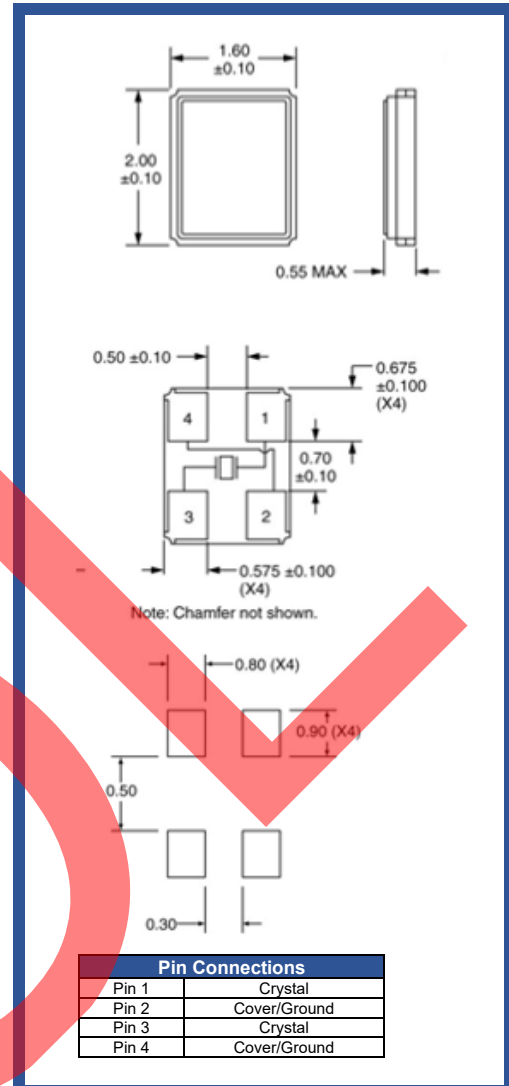
Product Feature:

SMD Package
Small package Foot Print
Supplied in Tape and Reel
Compatible with Leadfree
Processing

Applications:

PCMCIA Cards
Storage
PC's
Wireless Lan

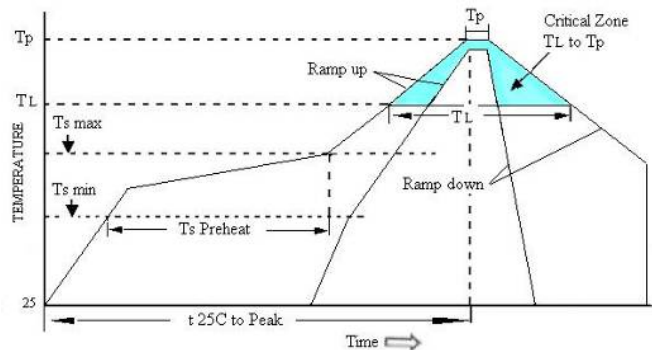
Frequency	16MHz to 72MHz
ESR (Equivalent Series Resistance) 16MHz – 23.999999MHz 24MHz – 25.999999MHz 26MHz – 72MHz	150 Ohms Maximum 80 Ohms Maximum 60 Ohms Maximum
Shunt Capacitance (C0)	3pF Maximum
Frequency Tolerance @ 25° C	(See Part Number Guide)
Frequency Stability over Temperature	(See Part Number Guide)
Mode of Operation	Fundamental
Crystal Cut	AT Cut
Load Capacitance	8pF to 32pF or Specify
Drive Level	100µW Maximum
Aging	±5ppm/Year Maximum
Operating Temperature Range	(See Part Number Guide)
Storage Temperature Range	-40°C to +85°C



Part Number Guide		Sample Part Number: ILCX19 - FB1F18 - 20.000000 MHz				
Package	Tolerance (ppm) at Room Temperature	Stability (ppm) over Operating Temperature	Operating Temperature Range	Mode (overtone)	Load Capacitance (pF)	Frequency
ILCX19 -	B = ±50 ppm	B = ±50 ppm	0 = 0°C to +50°C	F = Fundamental	8pF to 32pF Or Specify	- 20.000 MHz
	F = ±30 ppm	F = ±30 ppm	1 = 0°C to +70°C			
	G = ±25 ppm	G = ±25 ppm	2 = -10°C to +60°C			
	H = ±20 ppm	H = ±20 ppm	3 = -20°C to +70°C			
	I = ±15 ppm	I = ±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:



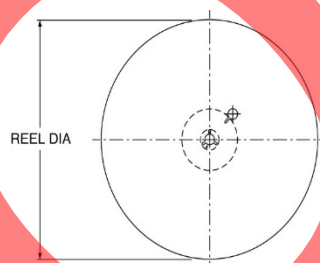
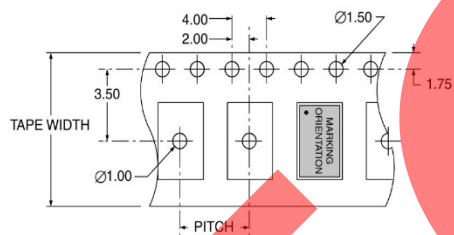
Units are backward compatible with 240C reflow processes

Ts max to T _L (Ramp-up Rate)	3°C / second max
Preheat	
Temperature min (Ts min)	150°C
Temperature typ (Ts typ)	175°C
Temperature max (Ts max)	200°C
Time (Ts)	60 to 180 seconds
Ramp-up Rate (T _L to T _p)	3°C / second max
Time Maintained Above Temperature (T _L)	217°C
Time (T _L)	60 to 150 seconds
Peak Temperature (T _p)	260°C max for 10 seconds
Time within 5°C to Peak Temperature (T _p)	20 to 40 seconds
Ramp-down Rate	6°C / second max
Time 25°C to Peak Temperature	8 minutes max

Package Information:

MSL = 1 (package does not contain plastic; storage life is unlimited under normal room conditions)
Termination = e4 (Au over Ni over W base metal).

Tape and Reel Information:



Quantity per Reel	3000
Pitch	4.0 ±0.2
Tape Width	8.0 ±0.2
Reel DIA	180

Dimensions: mm