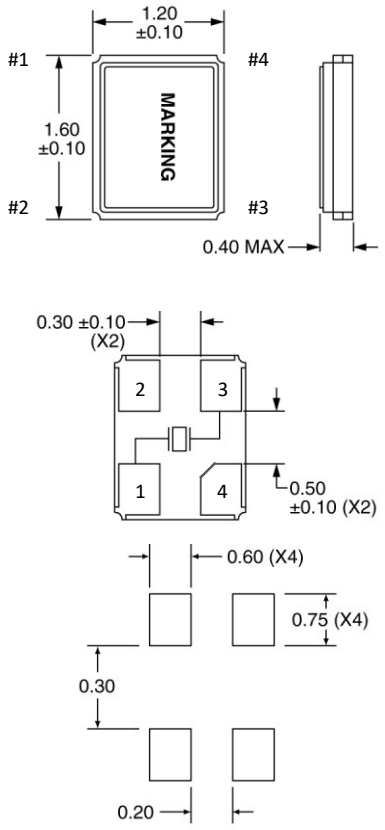
IXA10 Series

Product Feature:
AEC-Q200 Qualified
IATF 16949 certified production lines
RoHS and REACH compliant
Suitable for use in harsh environments

Applications:
Navigation, GPS
Information System
Instrument Panel, Ethernet
ADAS Radar, Camera,
Engine Control Units
Lidar Systems TPMS

Frequency	24MHz to 54MHz
Equivalent Series Resistance 24MHz – 39.999999MHz 40MHz – 50MHz	 150 Ohms Maximum 100 Ohms Maximum
Shunt Capacitance (C0)	5pF Maximum
Frequency Tolerance (at 25°C)	±50ppm, ±30ppm, ±25ppm, ±20ppm, ±15ppm, or ±10ppm
Frequency Stability (over Temperature)	±100ppm, ±50ppm, ±30ppm, or ±20ppm
Mode of Operation	Fundamental
Crystal Cut	AT Cut
Load Capacitance	8pF to 32pF or Specify
Drive Level	100µWatts Maximum
Aging	±3ppm/Year Maximum
Operating Temperature Range	-40°C to +85°C, -40°C to +105°C, or -40°C to +125°C
Storage Temperature Range	-50°C to +150°C



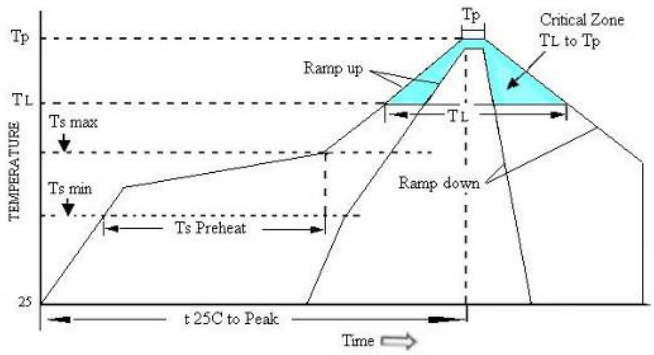
Pin Connections	
Pin 1	Crystal
Pin 2	Cover/Ground
Pin 3	Crystal
Pin 4	No Connect

Part Number Guide **Sample Part Number: IXA10-FBDF18- 32.000 MHz**

Package	Tolerance (ppm) at Room Temperature	Stability (ppm) over Operating Temperature	Operating Temperature Range	Mode (overtone)	Load Capacitance (pF)	Frequency
IXA10-	B = ±50 ppm	A = ±100 ppm	5 = -40°C to +85°C	F = Fundamental	8pF to 32pF Or Specify	- 32.000 MHz
	F = ±30 ppm	B = ±50 ppm	D = -40°C to +105°C			
	G = ±25 ppm	F = ±30 ppm*, **	F = -40°C to +125°C			
	H = ±20 ppm	H = ±20 ppm*, ***				
	I = ±15 ppm					
	J = ±10 ppm					

* Not available at all frequencies.
** Not available for Operating Temperature Range Option F.
*** Not available for Operating Temperature Range Option D or F.

Pb Free Solder Reflow Profile:



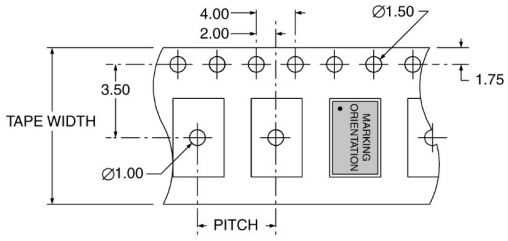
Units are backward compatible with 240C reflow processes

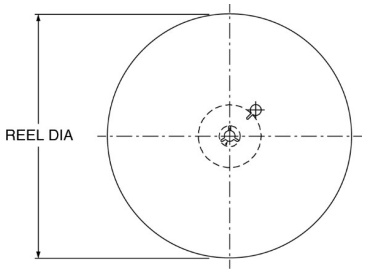
Ts max to T_L (Ramp-up Rate)	3ºC / second max
Preheat Temperature min (Ts min) Temperature typ (Ts typ) Temperature max (Ts max) Time (Ts)	 150ºC 175ºC 200ºC 60 to180 seconds
Ramp-up Tate (T_L to Tp	3ºC / second max
Time Maintained Above Temperature (T_L) Time (T_L)	 217ºC 60 to 150 seconds
Peak Temperature (Tp)	260ºC max for 10 seconds
Time within 5ºC to Peak Temperature (Tp)	20 to 40 seconds
Ramp-down Rate	6ºC / second max
Tune 25ºC 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	4.00
Tape Width	8.00
Reel DIA	180

Environmental Specifications:

Mechanical Shock	MIL-STD-202, Method 213
Vibration	MIL-STD-202, Method 204
Resistance to Soldering Heat	MIL-STD-202, Method 210
Solderability	J-STD-002
Gross Leak	MIL-STD-883, Method 1014, Condition C
Fine Leak	MIL-STD-883, Method 1014, Condition A2