

Product Features:

AEC – Q200 qualified
 IATF 16949 certified production lines
 RoHS and REACH compliant
 Suitable for use in harsh environments
 Extended operating temperature range: -40°C to +125°C

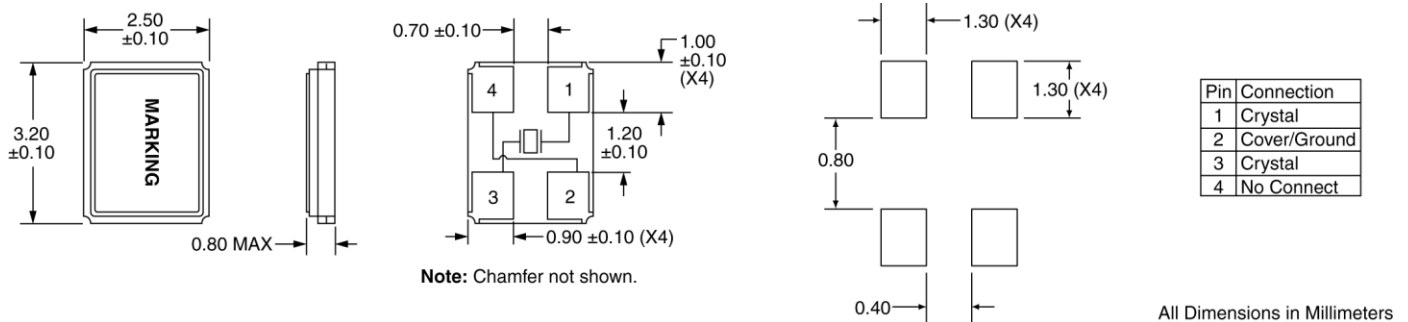
Applications:

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

Electrical Specifications

Frequency	8MHz to 66MHz
Equivalent Series Resistance 8MHz – 9.999999MHz 10MHz – 10.999999MHz 11MHz – 11.999999MHz 12MHz – 12.999999MHz 13MHz – 15.999999MHz 16MHz – 20.999999MHz 21MHz – 29.999999MHz 30MHz – 66MHz	800 Ohms Maximum 250 Ohms Maximum 150 Ohms Maximum 100 Ohms Maximum 80 Ohms Maximum 70 Ohms Maximum 60 Ohms Maximum 50 Ohms Maximum
Shunt Capacitance (C0)	3pF 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	200µW 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

Mechanical and Solder Pad Dimensions



Part Number Guide

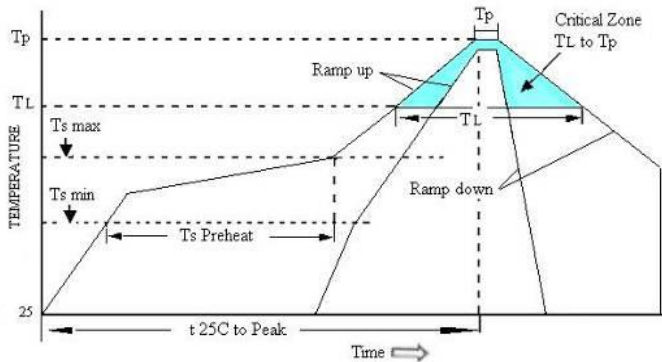
Sample Part Number: IXA16 – FBDF18 - 25.000 MHz

Package	Frequency Tolerance	Frequency Stability	Operating Temperature Range	Mode of Operations	Load Capacitance	Frequency
IXA16 -	B = ±50ppm	A = ±100ppm	5 = -40°C to +85°C	F = Fundamental	8pF to 32pF or Specify	- 25.000 MHz
	F = ±30ppm	B = ±50ppm	D = -40°C to +105°C			
	G = ±25ppm	F = ±30ppm*, **	F = -40°C to +125°C			
	H = ±20ppm	H = ±20ppm*, ***				
	I = ±15ppm					
	J = ±10ppm					

* 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:



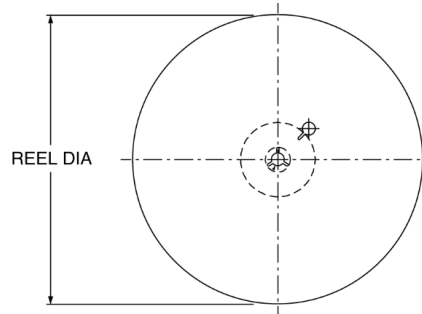
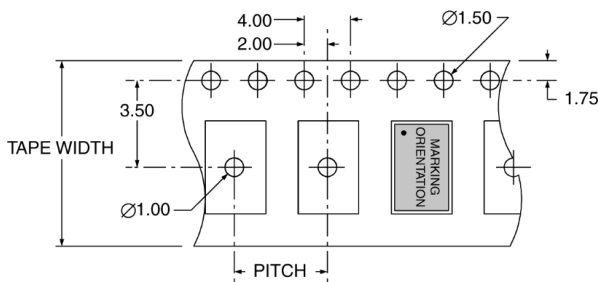
Units are backward compatible with +240°C reflow processes

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 metallization)

Tape and Reel Information:



PITCH	4.00
TAPE WIDTH	8.00
REEL DIA	180
QTY PER REEL	3,000

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

Marking:

Line 1: Frequency (XX.XX)
 Line 2: Date Code (YWW)