# **IXA16** Series

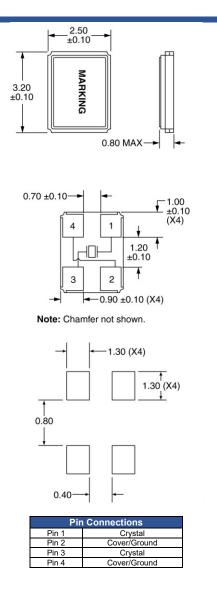


#### **Product Feature:** AEC-Q200 Qualified IATF 16949 certified production lines RoHS and REACH compliant Suitable for use in harsh environments

#### **Applications:**

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

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	7pF to 32pF or Specify	
Drive Level	200µWatts 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	



Part Number Guide		Sample Part Number: IXA16-FBDF18- 25.000 MHz				
Package	Tolerance (ppm) at Room Temperature	Stability (ppm) over Operating Temperature	Operating Temperature Range	Mode (overtone)	Load Capacitance (pF)	Frequency
IXA16-	B = ±50 ppm	A = ±100 ppm	5 = -40°C to +85°C	- F = Fundamental		- 25.000 MHz
	F = ±30 ppm	B = ±50 ppm	D = -40°C to +105°C		7pF to 32pF	
	G = ±25 ppm	F = ±30 ppm*, **	F = -40°C to +125°C			
	H = ±20 ppm	H = ±20 ppm*, ***			Or Specify	- 25.000 MHZ
	l = ±15 ppm					
	J = ±10 ppm*					

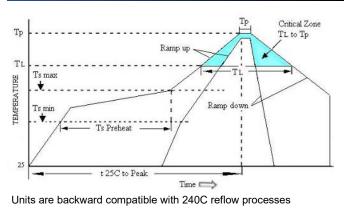
\* Not available at all frequencies.

\*\* Not available for Operating Temperature Range Option F. \*\*\* Not available for Operating Temperature Range Option D or F.

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## Pb Free Solder Reflow Profile:

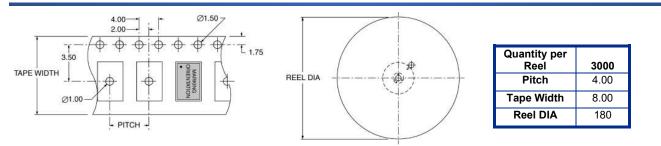


Ts max to $T_{L}$ (Ramp-up Rate)	3°C / second max	
Preheat		
Temperature min (Ts min)	150°C	
Temperature typ (Ts typ)	175°C	
Temperature max (Ts max)	200°C	
Time (Ts)	60 to180 seconds	
Ramp-up Tate (T <sub>L</sub> to Tp	3°C / second max	
Time Maintained Above		
Temperature (T <sub>L</sub> )	217°C	
Time (T <sub>L)</sub>	60 to 150 seconds	
Peak Temperature (Tp)	260°C max for 10 seconds	
Time within 5°C to Peak	20 to 10 seconds	
Temperature (Tp)	20 to 40 seconds	
Ramp-down Rate	6°C / second max	
Tune 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:**



### **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