





# X632 CERAMIC SURFACE-MOUNT CRYSTAL

### **FEATURES**

- Not recommended for new designs
- SMD package, 2 pad version
- Excellent heat resistance and shock resistance
- Applications: PDA, Computers, Microprocessors

6.0 x 3.5 x 1.1 mm



Item	Symbol	Specification		
Frequency Range	Fo	8 MHz ~ 50 MHz		
Operation Mode		Fundamental		
Operating temperature Range	То	-20° to +70°C (see options)		
Frequency Tolerance at 25°C $\Delta f/F$		± 50ppm max. (see options)		
Temperature Stability Δf/F		± 50ppm max. (see options)		
Load Capacitance (CL)	CL	series or 8 pF to 50 pF (see options)		
Equivalent Series Resistance	ESR	See Table 1		
Shunt Capacitance (Co)	Co	7pF Max		
Insulation Resistance	Ri	500 MΩ min. (at 100Vdc)		
Drive Level DL		100μW typical, 300μW max.		
Aging	Δf/F	±3ppm max (at 25°C, first year)		
Packing Unit		1000pcs / reel		
Soldering Condition		260 °C, 10 sec x2 max		
		Customer specifications on request		

#### TABLE 1: Standard ESR

Frequency (MHz)	ESR (Ω) max.
8.0 - 9.99	100
10.0 - 15.9	60
16.0 - 50.0	40

#### **OPTIONS & ORDERING INFORMATION**

X632-							MHz
	Freq. Tolerance	Freq. Stability	Operating Temp.	Load Capacitance	Mode	ESR if other than STD	Frequency in MHz
	<b>10</b> = ±10 ppm	<b>10</b> = ±10 ppm	<b>D</b> = -10° / +60°C	Please specify CL in	F = Fundamental	Specify a value in $\Omega$	Please specify the
	<b>15</b> = ±15 ppm	<b>15</b> = ±15 ppm	<b>E</b> = 0° / +70°C	pF or S for Series			frequency in MHz
	<b>20</b> = ±20 ppm	<b>20</b> = ±20 ppm	<b>F</b> = -20° / +70°C				
	<b>25</b> = ±25 ppm	<b>25</b> = ±25 ppm	<b>G</b> = -30° / +75°C				
	<b>30</b> = ±30 ppm	<b>30</b> = ±30 ppm	H = -30° / +85°C				
	<b>50</b> = ±50 ppm	<b>50</b> = ±50 ppm	K = -40° / +85°C				

<sup>\*</sup> Note: Not all combinations are possible, please consult us.







## **OUTLINE DIMENSIONS**

