Frequency Technology

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# X42 CERAMIC SURFACE-MOUNT CRYSTAL

### **FEATURES**

- Small SMD package
- Tight Tolerance & Stability available
- Excellent heat resistance and shock resistance
- Applications: Test equipment, Wireless application, Modems,...

4.0 x 2.5 x 0.75 mm



Item	Symbol	Specification		
Frequency Range	Fo	12 MHz ~ 60 MHz		
Operation Mode		Fundamental		
Operating temperature Range	То	-20° to +70°C (see options)		
Frequency Tolerance at 25°C	Δf/F	± 50ppm max. (see options)		
Temperature Stability	Δf/F	± 50ppm max. (see options)		
Load Capacitance (CL)	CL	series or 8 pF to 32 pF (see options)		
Equivalent Series Resistance	ESR	See Table 1		
Shunt Capacitance (Co)	Co	3pF Max		
Insulation Resistance	Ri	500 MΩ min. (at 100Vdc)		
Drive Level	DL	100μW typical, 300μW max.		
Aging	Δf/F	±2ppm max (at 25°C, first year)		
Packing Unit		3000pcs / reel		
Soldering Condition		260°C, 10 sec x2 max		
		Customer specifications on request		

#### TABLE 1: Standard ESR

Frequency (MHz)	ESR (Ω) max.
12.0 - 19.99	80
20.0 - 25.9	70
26.0 - 60.0	50

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

X42-						MHz	
	Freq. Tolerance	Freq. Stability	Operating Temp.	Load Capacitance	Mode	Frequency in MHz	ESR if other than STD
	<b>10</b> = ±10 ppm	<b>10</b> = ±10 ppm	<b>D</b> = -10° / +60°C	Please specify CL in	F = Fundamental	Please specify the	Specify a value in Ω
	<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.

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## **OUTLINE DIMENSIONS**

