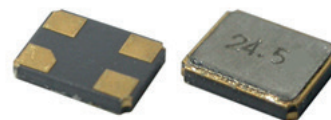


X12 CERAMIC SURFACE-MOUNT CRYSTAL

FEATURES

- Ultra miniature SMD package
- Very Low Ageing

1.25 x 1.05 x 0.30 mm



Item	Symbol	Specification
Frequency Range	Fo	32 MHz ~ 80 MHz
Operation Mode		Fundamental
Operating temperature Range	To	-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 6 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	10μW typical, 100μW max.
Aging	Δf/F	±1ppm 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.
32 - 51.9	60
52 - 80.0	50

OPTIONS & ORDERING INFORMATION

X12- MHz	-
	Freq. Tolerance	Freq. Stability	Operating Temp.	Load Capacitance	Mode	Frequency in MHz	ESR if other than STD
	10 = ±10 ppm	10 = ±10 ppm	D = -10° / +60°C	Please specify CL in pF or S for Series	F = Fundamental	Please specify the frequency in MHz	Specify a value in Ω
	15 = ±15 ppm	15 = ±15 ppm	E = 0° / +70°C				
	20 = ±20 ppm	20 = ±20 ppm	F = -20° / +70°C				
	25 = ±25 ppm	25 = ±25 ppm	G = -30° / +75°C				
	30 = ±30 ppm	30 = ±30 ppm	H = -30° / +85°C				
	50 = ±50 ppm	50 = ±50 ppm	K = -40° / +85°C				

* Note : Not all combinations are possible, please consult us.

OUTLINE DIMENSIONS

