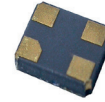


# X11 32.768 kHz SURFACE-MOUNT CRYSTAL

## FEATURES

- Smallest industry package size for 32.768 kHz, 4 pad package
- Extended temperature -40/+85°C for industrial applications
- Applications : Wireless applications , Commercial and Industrial applications

1.2 x 1.0 x 0.35 mm



Item	Symbol	Specification
Nominal Frequency	Fo	32.768 kHz
Cut		XY-cut
Operating temperature Range	To	-40° to +85°C
Frequency Tolerance at 25°C	Δf/F	± 20ppm standard (see options)
Temperature coefficient	β	-0.040 ppm/°C <sup>2</sup> max
Load Capacitance (CL)	CL	12.5 pF
Equivalent Series Resistance	ESR	90 kΩ max.
Insulation Resistance	Ri	500 MΩ min. (at 100Vdc)
Drive Level	DL	0.5 μW max.
Aging	Δf/F	±3ppm max (at 25°C, first year)
Packing Unit		5000pcs / reel
Soldering Condition		260°C, 10 sec x2 max

## OPTIONS & ORDERING INFORMATION

X11-	..... —	..... —	32.768 kHz
	Freq. Tolerance	Load Capacitance	
	20 = ±20 ppm	12.5 = 12.5 pF	

# OUTLINE DIMENSIONS

