

RSX1612

The RSX1612 is a compact, low-profile SMD crystal that delivers reliable performance across a wide frequency range of 16 to 80 MHz with a precision frequency tolerance of ± 15 ppm. It is well-suited to various applications, including smart wireless devices, GNSS systems, and communication applications.

Features

- Frequency (Fn): 16 to 80 MHz
- Calibration tolerance: ± 15 ppm
- Operating temperature: -40 to 125°C

Applications

- Automotive and GNSS
- Handset, PND, and PDA
- Communications
- Feature phone

1.6 x 1.2 x 0.35 mm



Standard Specifications

Parameter	Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency (Fn)		16 - 80		MHz	
Calibration tolerance			± 15	ppm	Frequency at 25°C $\pm 2^\circ\text{C}$ and specified load capacitance
Temperature range	-30		85	°C	Operating temperature
	-40		125		
Frequency stability over temperature (FvT)			± 15 to ± 50	ppm	Temperature dependent. Referenced to frequency reading at 25°C and the specified load capacitance
Long term stability			± 1	ppm	Frequency drift over 1 year at 25°C
Load capacitance (CL)		5 to 32		pF	Frequency is calibrated at room temperature
Shunt capacitance (CO)			3	pF	
Drive level			100	μW	200 μW max. available upon request
Equivalent series resistance (ESR)			100	Ω	24.0 to 29.999 MHz
			80		30.0 to 53.999 MHz
			60		54.0 to 60.0 MHz
Insulation resistance (IR)	500			M Ω	100 V ± 15 V at 25°C

Model Outline and Recommended Pad Layout

TOP VIEW

SIDE VIEW

RECOMMENDED PAD LAYOUT

BOTTOM VIEW

PIN	CONNECTIONS
1	Crystal
2	GND
3	CrystalL
4	GND

NOTE: Outline unit is mm.