

## RSX1612

The RSX1612 is a miniature low profile AT-cut quartz crystal. True SMD style, ceramic package with nickel plated lid, seam welded. The product is supplied on tape and reel.

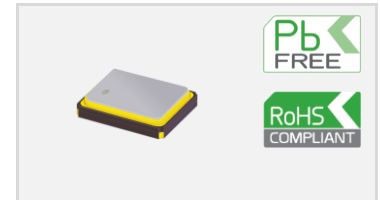
### Features

- Low ageing
- Wide temperature range
- Low hysteresis

### Applications

- Automotive and GNSS
- Communications
- Consumer
- Feature phone

1.6 x 1.2 x 0.35 mm



### Standard Specifications

Parameter	Min.	Typ.	Max.	Unit	Test Condition / Description
Nominal frequency		24 - 52		MHz	
Calibration tolerance			±10 to ±50	ppm	Frequency at 25°C ± 2°C and specified load capacitance
Reflow shift			±1	ppm	Frequency shift after reflow with 4 hours settling at 25°C
Temperature range	-40		85	°C	Operating temperature
Frequency stability over temperature			±10 to ±50	ppm	Referenced to frequency reading at 25°C and the specified load capacitance
Frequency perturbations			1	ppm	Residual error from the frequency versus temperature curve fit 5th order. Minimum of 1 frequency reading every 3°C over the operating temperature range
Long term stability			±1	ppm	Frequency drift over 1 year at 25°C
g sensitivity			2	ppb/g	Gamma vector of all three axes from 30 Hz to 1500 Hz
Load capacitance (CL)		5 to 32		pF	Frequency is calibrated at room temperature
Shunt capacitance (CO)		0.5 to 3		pF	
Drive level		10	100	µW	
Equivalent series resistance (ESR)			85	Ω	
Insulation resistance (IR)	500			MΩ	100 V ±15 V at 25°C

### Model Outline and Recommended Pad Layout

**TOP VIEW**

**SIDE VIEW**

**RECOMMENDED PAD LAYOUT**  
- TOP VIEW

**BOTTOM VIEW**

**PIN CONNECTIONS**

PIN	CONNECTIONS
1	CRYSTAL
2	GND
3	CRYSTAL
4	GND/NC

**UNIT: mm**