

### FEATURES

- Ultra-miniature SMD design, 2.0 x 1.2 x 0.4mm
- Frequency Range 24MHz ~ 50MHz
- High shock and vibration resistance
- Hermetically sealed
- Ceramic lid
- Excellent ageing characteristics
- Full military testing available

### DESCRIPTION

CX16 crystals are manufactured with an unique photolithographic and chemical milling process and are then sealed within a ceramic package for high stability and low ageing. The parts are available with tight calibration tolerances and high stability over temperature. With a fast start-up time the crystal is ideally suited to applications with space constraint and require components with low profiles.

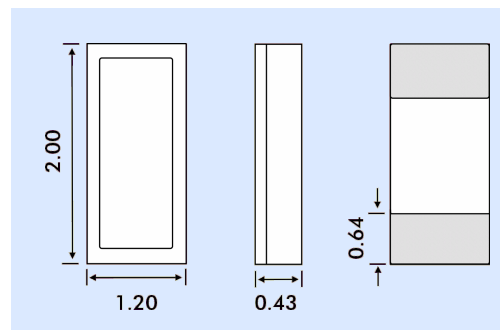
### SPECIFICATION

Specifications stated are typical at 25°C unless otherwise indicated. Specifications may change without notice.

Fundamental Frequency:	24.0MHz	26.5MHz
Motional Resistance R (Ω):	100	90
Motional Capacitance C1 (fF):	1.3	1.4
Quality Factor Q (k):	30	30
Shunt Capacitance C0 (pF):	0.6	0.6
Standard Calibration Tolerance <sup>1</sup> :	±100ppm or tighter as required.	
Load Capacitance:	10pF (or as specified)	
Drive Level:	200µW maximum	
Frequency Stability <sup>1,2</sup>		
-10° to +70°C:	±50ppm to ±10ppm	
-40° to +85°C:	±100ppm to ±20ppm	
-55° to +125°C:	±100ppm to ±30ppm	
Ageing, First Year:	±5ppm maximum (Better than ±1ppm available)	
Shock, Survival:	5000g, 0.3ms, ½ sine	
Vibration, Survival <sup>3</sup> :	20g rms, 10~2000Hz swept sine	
Operating Temperature Range:	-10°C to +70°C (Commercial) -40°C to +85°C (Industrial) -55°C to +125°C (Military)	
Storage Temperature Range:	-55° to +125°C	
Maximum Process Temperature:	+260°C for 20 seconds	

1. Other tolerances available, contact Euroquartz sales
2. Does not include calibration tolerance. (Frequency stability characteristics follow that of the AT-Cut thickness-shear mode.)
3. Per MIL-STD-202G, Method 204D, Condition D. Random vibration testing also available.

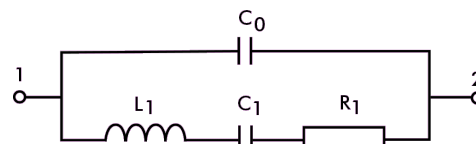
### OUTLINE & DIMENSIONS



### TERMINATION - PLATING

Designation	Termination
SM1	Gold Plated (Lead Free)

### CRYSTAL EQUIVALENT CIRCUIT



R1 Motional Resistance      L1 Motional Inductance  
C1 Motional Capacitance      C0 Shunt Capacitance

### PACKAGING

CX16 crystals are supplied tray packed

### HOW TO ORDER LOW PROFILE CX16L CRYSTALS

