

Helping Customers Innovate, Improve & Grow

Table 1. Electrical Performance

| Parameter | Symbol | Min. | Typ | Max | Units |
|--------------------------------------|------------|------------------------------|-----|--------|-------|
| Nominal Frequency | F_{NOM} | 12.000 | | 60.000 | MHz |
| Mode | | Fundamental, AT - Cut | | | |
| Operating Temperature Range | T_{OP} | 0/70, -10/70, -20/70, -40/85 | | | °C |
| Stability Over T_{OP} ¹ | F_{STAB} | ±10 | | ±100 | ppm |
| Frequency Tolerance ² | F_{TOL} | | ±10 | | ppm |
| Load Capacitance | C_L | 6 | | 32 | pF |
| Shunt Capacitance | C_o | | | 5 | pF |
| Drive Level | | | 10 | 100 | uW |
| Aging / 1st year (at 25 °C) | F_{AGE} | | | ±5 | ppm |
| Insulation Resistance | | 500 | | | MOhm |
| Storage Temperature | T_{STO} | -40 | | 90 | °C |
| Equivalent Series Resistance | | | | | |
| Crystal Frequency | ESR | | | | Ohm |
| 12.000MHz-14.000MHz | | | | 100 | |
| 14.001MHz-19.000MHz | | | | 80 | |
| 19.001MHz-30.000MHz | | | | 60 | |
| 30.001MHz-60.000MHz | | | | 40 | |

1. Referenced to the Frequency at 25 °C.

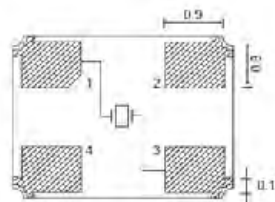
2. Frequency measured at 25 °C ± 3 °C.

Product is compliant to RoHS directive and fully compatible with lead free assembly. 

Package Drawing



BOTTOM VIEW



All Dimensions in mm

RECOMMENDED PAD LAYOUT

