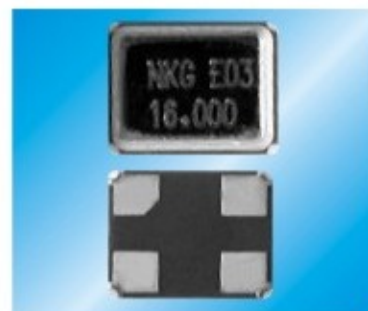


SMD CRYSTAL UNIT CX-3M (3.2X2.5X0.65 mm)

FEATURES

- Compact and thin (3.2X2.5X0.65 mm typ)
- Frequency range of 13M to 54M with Fund
- Suitable application include telecommunications equipment, Short-range radio link modules, DVC, DSC PDA and PC.
- Excellent heat resistance and shock resistance.
- Products that are lead-free. These can meet the requirement of re-flow profiling using lead-free solder



ELECTRICAL SPECIFICATIONS

| Parameter | Symb | Condition | Min | Typ | Max | Units |
|-----------------------------|------------------|--------------------|------|-----|------|-------|
| Frequency Range | Fo | | 13 | | 54 | MHz |
| Frequency Tolerance at 25°C | $\Delta F / F_0$ | | +10 | +15 | +30 | ppm |
| Temperature Stability | Tc | 25°C | +10 | +15 | +30 | ppm |
| Operating Temperature Range | T _{OPR} | | -20 | | +70 | °C |
| Storage Temperature Range | T _{STR} | | -40 | | +85 | °C |
| Shunt Capacitance | C ₀ | | | | 3 | pF |
| Load Capacitance | C _L | | 8 | | 12 | pF |
| Insulator Resistance | I _R | 100V _{DC} | 500 | | | MΩ |
| Drive Level | D _L | | 10 | 100 | 300 | μW |
| Aging (at 25°C) | Fa | AT 25°C, per year | -2.0 | | +2.0 | ppm |

EQUIVALENT SERIES RESISTANCE (ESR)

| Frequency Range | Max ESR(W) | Mode |
|------------------------|------------|-------------|
| 13.000MHz to 19.999MHz | 80 | Fundamental |
| 20.000MHz to 25.999MHz | 70 | Fundamental |
| 26.000MHz to 54.000MHz | 50 | Fundamental |

DIMENSIONS

Unit:mm

