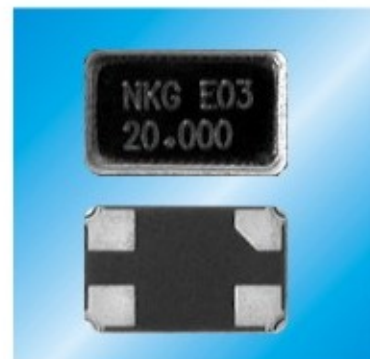


SMD CRYSTAL UNIT CX-4M

4.0X2.5X0.75 mm

FEATURES

- Compact and thin (4.0X2.5X0.75 mm typ.)
- Prepared frequencies can meet most of bluetooth chipsets
- Excellent electric performance optimum for mobilephone and bluetooth applications are exhibited
- 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	F ₀		12		32	MHz
Frequency Tolerance at 25°C	ΔF/F ₀		±10	±15	±30	ppm
Temperature Stability	T _c	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)	F _a	AT 25°C, per year	-2.0		+2.0	ppm

EQUIVALENT SERIES RESISTANCE (ESR)

Frequency Range	Max ESR(Ω)	Mode
12.000MHz to 19.999MHz	80	Fundamental
20.000MHz to 25.999MHz	70	Fundamental
26.000MHz to 32.000MHz	50	Fundamental

DIMENSIONS

Unit:mm

