CARDINAL COMPONENTS

Ceramic Surface Mount

· Lowest maximum drive level available

• Widest frequency range

· Very tight stabilities

Part Numbering Example: CX5 Z - A1 - B2 - C2 60 - 10.0 D18 - 3

CX5 10.0 TOLERANCE RESISTANCE FREQUENCY SERIES ADDED FEATURES OPERATING TEMP. STABILITY D16,18,20,ETC. BLANK: FUND. BLANK = BULK PACK A0 = -10°C~ +60°C $B1 = \pm 100$ SEE CHART CX5 $C1 = \pm 100$ $Z = TAPE AND REEL A1 = -10°C \sim +70°C$ **BELOW** -3: 3rd OT $B2 = \pm 50$ $C2 = \pm 50$ DS = SERIES $A2 = -40^{\circ}C \sim +85^{\circ}C$ -5: 5th OT $B3 = \pm 30$ $C3 = \pm 30$ -7: 7th OT $A3 = -55^{\circ}C \sim +125^{\circ}C$ $B4 = \pm 10$ $C4 = \pm 10$ -BT: BT Cut

Specifications:

Frequency Range:

9.000 ~ 40.320 MHz AT-Cut Fundamental 40.000 ~ 90.000 MHz 3rd Overtone

90.000 ~ 150.000 MHz 5th Overtone

Operating Temperature: $0^{\circ}\text{C} \sim +70^{\circ}\text{C}$ Standard $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Frequency Stability: ± 50 ppm Standard

Stabilities from \pm 5 ppm available.

Frequency Tolerance: ± 50 ppm Standard

(at $25^{\circ}C$) Tolerances from \pm 10 ppm available.

Load Capacitance: Parallel or series.

Please specify your required load.

Resistance: Maximum resistance corresponds to frequency.

See chart below.

Standard: Shunt Capacitance: 7 pF Max

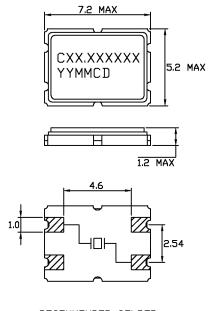
Aging: ± 3 ppm first year Drive Level: 50 μW Max

Packaging: Tape and Reel (1K per Reel)

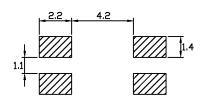
CX5

Series

CX5



RECOMMENDED SOLDER PAD LAYOUT



Resistance Chart: All resistances are maximum values.

EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE), AND CUT					
Frequency MHz	$ESR(\Omega)$	Mode/cut	Frequency MHz	ESR (Ω)	Mode/cut
9.500~10.999	60 Max	Fund./AT	40.000~49.999	80 Max	3rd Overtone/AT
11.000~13.999	50 Max	Fund./AT	50.000~89.999	50 Max	3rd Overtone/AT
14.000~15.999	40 Max	Fund./AT	90.000~150.000	100 Max	5th Overtone/AT
16.000~39.999	30 Max	Fund./AT			

^{*}NOTE: The above ABC combinations cover basic specification options. We tailor our crystal specifications to meet customer requirements. Please contact our sales department if you don't see exactly what you need.