# **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	Z	A1*	B2	C2	60	10.0	D18	- 3
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CX5		A0 = -10°C ~ +60°C					D16,18,20,ETC.	BLANK: FUND.
	Z = TAPE AND REEL	A1 = -10°C ~ +70°C	$B2 = \pm 50$	$C2 = \pm 50$	BELOW		DS = SERIES	-3: 3rd OT
		A2 = -40°C ~ +85°C						-5: 5th OT
		A3 = -55°C ~ +125°C	$B4 = \pm 10$	$C4 = \pm 10$				-7: 7th OT
								-BT: BT Cut

CARDINAL COMPONENTS

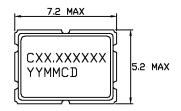
\*NOTE: The above ABC combinations cover basic specification options. We tailor our crystal specifications to meet customer requirements. Please contact our sales department if you don't see exactly what you need.

### **Specifications:**

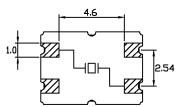
#### **Frequency Range:**

	<b>J</b> -					
	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°C ~ +70°C	Standard			
		-40°C ~ +85°C				
Frequency Stal	oility:	± 50 ppm Standard				
		Stabilities from	± 5 ppm available.			
Frequency Tole	rance:	± 50 ppm Standard				
(at 25°C)		Tolerances from ± 10 ppm available.				
Load Capacitar	nce:	Parallel or series.				
		Please specify	your required load.			
Resistance: Maximum resistance corresponds to free			oonds to frequency.			
	See chart below.					
Standard:	X					
	Standard: Shunt Capacitance: 7 pF Max Aging: ± 3 ppm first year					
	Drive Level: 50 μW Max					
Packaging: Tape and Reel (1K per Reel)						

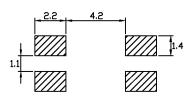
CX5







RECOMMENDED SOLDER PAD LAYOUT



## Resistance Chart: All resistances are maximum

EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE), AND CUT								
Frequency MHz	<b>ESR(</b> Ω)	Mode/cut	Frequency MHz	<b>ESR (</b> 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						

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Series CX5

RoHS compliant 2002/95/EC