

# Surface Mount Crystal

- S6CA (6.0 x 3.5 x 1.1 mm)
- S6GA (6.0 x 3.5 x 1.2 mm)



## Electrical Specifications

SMD Crystal S6CA & S6GA		S6CA **SEE TABLE 2 BELOW	S6GA **SEE TABLE 2 BELOW
<b>CERAMIC SMD</b>			
<b>PARAMETER</b>	<b>CONDITION</b>		
FREQUENCY RANGE	FUNDAMENTAL	10 MHz to 60 MHz	10 MHz to 55 MHz
	3rd O.T.	40 MHz to 80 MHz	40 MHz to 55 MHz
DIMENSIONS		6.0 x 3.5 x 1.1 MM	6.0 x 3.5 x 1.2 MM
LOAD CAPACITANCE (CL)		6 TO 32 pF & SERIES	6 TO 32 pF & SERIES
STATIC CAPACITANCE (Co)		7 pF MAX	7 pF MAX
EQUIVALENT SERIES RESISTANCE (ESR)		SEE TABLE 1 BELOW	SEE TABLE 1 BELOW
MODE		SEE TABLE 1 BELOW	SEE TABLE 1 BELOW
DRIVE LEVEL		10 µW typ., 100 µW MAX	10 µW typ., 100 µW MAX
FREQ. TOLERANCE AT +25C	STANDARD	+/-30 PPM	+/-30 PPM
	OPTIONAL	+/-10 PPM to +/-100 PPM	+/-10 PPM to +/-100 PPM
STABILITY VS. TEMP.	STANDARD	+/-30 PPM	+/-30 PPM
	OPTIONAL	+/-10 PPM to +/-100 PPM	+/-10 PPM to +/-100 PPM
OPERATING TEMP. RANGE	STANDARD	-20°C to +70°C	-20°C to +70°C
	OPTIONAL	SEE TABLE 2 BELOW	SEE TABLE 2 BELOW
STORAGE TEMP. RANGE		-40°C to +85°C	-40°C to +85°C
AGING	FIRST YEAR	5 PPM	5 PPM
HERMETIC SEALED		YES, SEAM SEAL	YES, GLASS SEAL
INSULATION RESISTANCE		500 MΩ Min	500 MΩ Min
SOLDER PADS	QTY:	2	2
DLD TESTED	RLD, DLD, FLD	YES, 100%	YES, 100%
RoHS STATUS		FULLY COMPLIANT	BY EXEMPTION
LEGACY P/N		CX6CA	CX6GA

FREQUENCY RANGE	MAX ESR	MODE
10.000 MHz to 10.999 MHz	100 Ohms	Fundamental
11.000 MHz to 11.999 MHz	80 Ohms	Fundamental
12.000 MHz to 15.999 MHz	60 Ohms	Fundamental
16.000 MHz to 42.000 MHz	40 Ohms	Fundamental
40.000 MHz to 80.000 MHz	55 Ohms	3rd Overtone

POPULAR TEMPERATURE RANGES
-10°C / +60°C
-20°C / +70°C
-40°C / +85°C

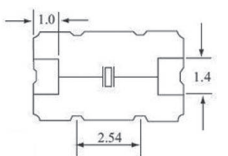
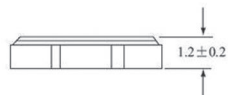
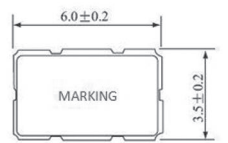
OTHER TEMPERATURE RANGES AVAILABLE - CONSULT FACTORY

**\*\* PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS**

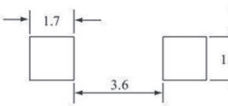
NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Dimensions (Unit:mm)

## \*NKG Crystal Part Example Key



RECOMMENDED LAND PATTERN



**S6CA-20M000-20-30 50-F P**

Family (a grouping of similar parts sharing common attributes and features)

Frequency (20.000 MHz)

P = 70° C

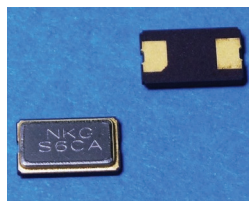
F = -30° C

Stability over Temperature

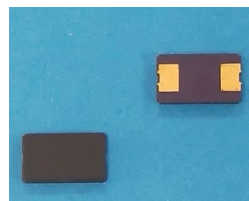
Frequency Tolerance at 25° C

CL (load capacitance)

1st letter	2nd letter
A= -55°	L= 50°
B= -50°	M= 55°
C= -45°	N= 60°
D= -40°	P= 70°
E= -35°	Q= 75°
F= -30°	R= 80°
G= -25°	T= 85°
H= -20°	U= 90°
J= -10°	V= 100°
K= 0°	W= 105°
	X= 110°
	Y= 120°
	Z= 125°



\*NOT TO SCALE



\*NOT TO SCALE

**Contact**  
[www.nkg-usa.com/contactnkg](http://www.nkg-usa.com/contactnkg)