

CERAMIC SMD TYPE

SX-8

- Four Pad Ceramic SMD Package
- Fundamental Crystal Design
- Tight Tolerance/Stability
- Using Highly Reliable Seam Weld Method
- Taping and Reel Available, Automatic Mountable
- Pb-free and RoHS Compliance



■ ELECTRICAL SPECIFICATIONS

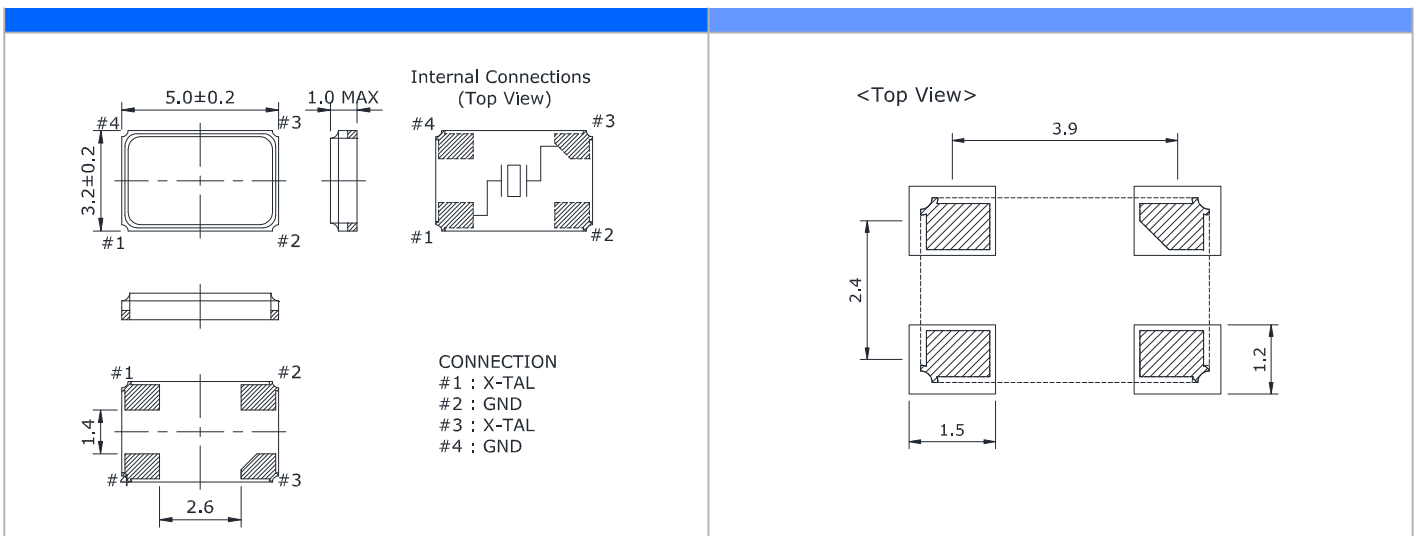
Frequency Range	8.000 to 54.000 MHz
Operating Temperature Range	-20 to +70 °C, -40 to +85 °C, or specify
Storage Temperature Range	-40 to +85 °C
Frequency Tolerance (at 25°C)	±15, ±30, ±50 ppm(STD), or specify
Frequency Stability	±10 to ±50 ppm(-20 to +70 °C)
Over Operating Temperature Range	±20 to ±100 ppm(-40 to +85 °C)
Load Capacitance (CL)	18 pF(STD), Custom CL≥10 pF or Series Resonant
Drive Level	10 μW(200 μW Max.)
Shunt Capacitance (C0)	7.0 pF Max.
Aging (at 25°C)	±3 ppm/year Max.
Insulation Resistance	500 MΩ Min. at 100 V _{DC}

■ EQUIVALENT SERIES RESISTANCE(ESR)

Frequency Range(MHz)	ESR(Ω Max.)	Mode of Oscillation
8.000 ~ 9.999	100	Fundamental
10.000 ~ 11.999	70	Fundamental
12.000 ~ 14.999	70	Fundamental
15.000 ~ 19.999	60	Fundamental
20.000 ~ 34.999	50	Fundamental
35.000 ~ 43.999	40	Fundamental
44.000 ~ 54.000	40	Fundamental

■ MECHANICAL DIMENSIONS (mm)

■ LAND PATTERN (mm)



PART NUMBERING GUIDE

TABLE 1.

S O 18 1 30 M7 - 27.00000 - T&R

PACKAGE TYPE
SX-8(5.0×3.2mm)

LOAD CAPACITANCE
18 : 18 pF

SR : SERIES

MODE OF OSCILLATION
1 : FUNDAMENTAL

FREQUENCY
TOLERANCE AT 25°C
30 : ±30 ppm
XX: Two digit for Tolerance

PACKAGE OPTION
BLANK : BULK
T&R : TAPE & REEL

FREQUENCY
TABLE 1.
XX: Two digit for Stability

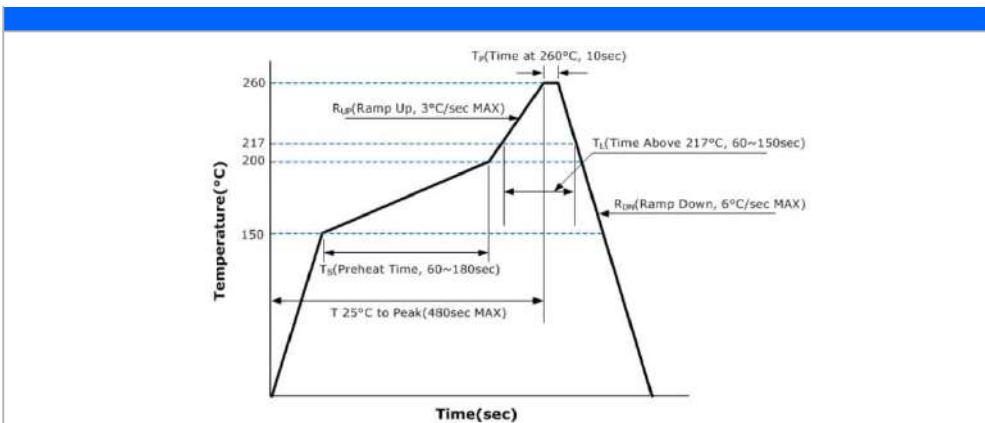
Stability		FREQUENCY STABILITY VS. TEMPERATURE RANGE					
		±10	±15	±20	±30	±50	±100
Temp		3	4	5	6	7	8
-10~70°C	D	*	*	*	*	*	*
-20~70°C	E	*	*	*	*	*	*
-30~60°C	F	*	*	*	*	*	*
-20~85°C	G		*	*	*	*	*
-30~70°C	H			*	*	*	*
-30~85°C	I			*	*	*	*
-40~85°C	J			*	*	*	*
-40~90°C	K				*	*	*
-40~105°C	L				*	*	*
-40~125°C	M					*	*

ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Solderability	MIL-STD-883, Method 2003

REFLOW PROFILE

MARKING GUIDE



LINE 1 : XX.XXX
 LINE 2 : SUNNY Y WW

Sunny _____
 Year _____
 Week _____

Frequency in MHz

TAPE AND REEL DIMENSIONS

1,000pcs/reel

MAT'L : P.S
 COLOR : WHITE or BLACK
 REFERENCE R=0.2