

#### Features

- Surface mounting type crystal resonators
- A great number of standard frequencies
- Wide frequency range from 3MHz to 100MHz
- Highly mass production capability
- Offering excellent frequency stability
- Automatic mounting and reflow soldering
- Application: PC, Automotive, Game Equipment, Visual Applications, Communications, etc
- RoHS Compliant & Pb-Free

#### **Standard Specification**

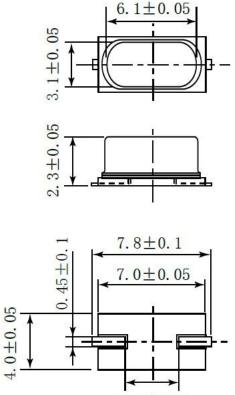
Туре	6P SMD Crystal			
Frequency Range	3~34 MHz	27~100 MHz		
Overtone Order	Fundamental	3rd Overtone		
Load Capacitance	16pF, 20pF, 30pF	16pF, 20pF, 30pF, 32pF, or specify		
Drive Level	1~500µW Max. (100µW Typ.)			
Frequency Tolerance	±10ppm, ±20ppm, or specify			
Series Resistance	40~200Ω	60~100Ω		
Operating Temperature	-20~+70°C,	-20~+70°C, -40~+85°C		
Storage Temperature	-55~+125°C			
Shunt Capacitance	7pF Max.			
Aging (at 25°C)	±3ppm /Year Max.			
Packing Unit	1000pcs. /Reel			



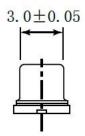


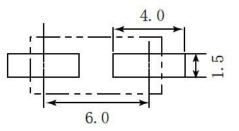


## **Dimensions (mm)**



 $2.5 \pm 0.05$ 





### Part ordering information

Χ	-6P	-3	-16	-10	-40	-C
	Series	Frequency	Load Capacitance	Tolerance	ESR	Temperature Range
		e.g	e.g	e.g	e.g	e.g A= -10~+60°C B= -20~+70°C
		3.000 = 3MHz	16 = 16pF	10 = 10ppm	40 = 40Ω	C =-40~+85°C D =-40~+105°C E =-55~+125°C



## **Reliability Tests Specification**

Test item	Equipment	Condition	Specification
1.SOLDERABILITY TEST	SJK-REL001、RC-328A	1. Solderabiliity:235±5°C, 5±0.5S 2. Heat resistance:260±5°C,10±1S restoration of 1 hour	MIL-STD-883E Method 2003.7
2. HERMETICITY TEST	HELIOT-306S	FC-84 FLUOROCARBON,BUBBLE MACHINE	MIL-STD-883E Method 1014.10
3. VIBRATION TEST	HG-V4、S&A 250B	Enable Crystal(10g) from 10-55- 10Hz,X、Y、Z horizontal,1 Minute vibration/time, 1time/ 2 hours.	MIL-STD-883E Method 2007.3
4.MECHANICAL SHOCK	HPC-200、S&A 250B	Enable Crystal 50G(490m/s2) time=11 ms speed=3.4 m/s half sine wave oscillation	JIS C6701
5. DROP TEST	HARD BOARD.S&A250B	75CM HIGH,3 TIMES ON HARD BOARD	MIL-STD-202F Method 213B
6. HIGH & LOW TEMP STORAGE TEST (Static test)	H-PTH-80CK & HM101-3ABN, S&A 350B/250B	High temperature: 125°C±2°C,1000hr; Low temperature:-40°C±3°C,1000hrs	MIL-STD883C, METHOD 1011.8
7.TEMP & HUM CYCLING TEST	H-PTH-80CK CHAMBE , S&A 350B/250B	Temperature:-10°C±2°C~65°C±2 °C,Humidity:93±3%,1 cycle need 24 hrs. 5cycles.	MIL-STD-883E Method 1005.8
8. HIGH TEM. & HUM. STORAGE TEST	H-PTH-80CK CHAMBE , S&A 350B/250B	Temperature:40°C±2 , Humidity:85+3,- 2%,Store 96 hrs	JIS C6701
9.AGEING TEST	H-PTH-80CK CHAMBE , S&A 350B/250B	Temperature:40°C±2 , Humidity:85+3,- 2%,Store 96 hrs	JIS C5023



# X-6P Series Mini 49SSMD Crystal Size: 6.1×3.1×2.3 mm 3~100 MHz / 16~20 pF / 10~20ppm

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