

### Features

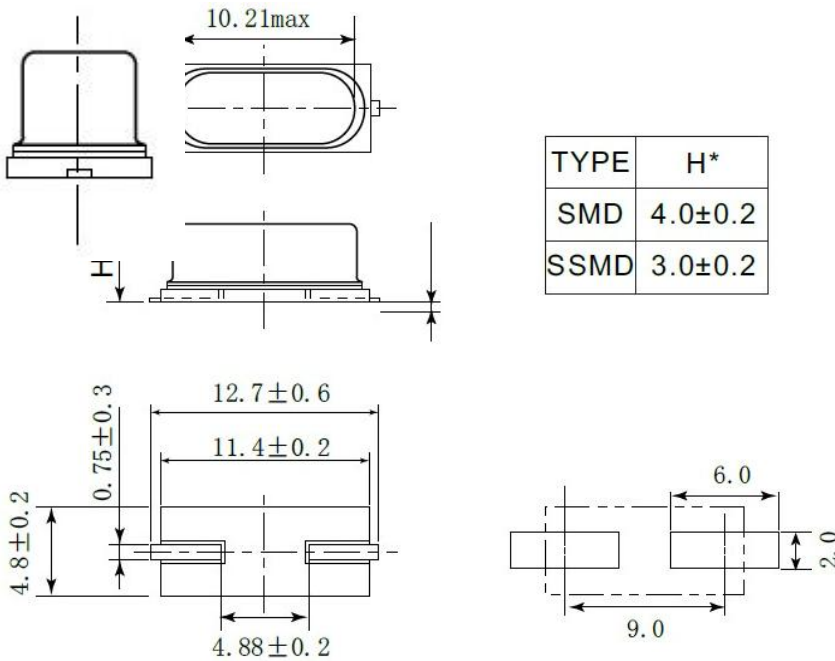
- SMD / SSMD crystal resonators
- A great number of standard frequencies
- Wide frequency range from 3MHz to 100MHz
- Highly mass production capability
- Offering excellent frequency stability
- Automatic mounting and reflow soldering
- Application: PC, Automotive, Game Equipment, Visual Applications,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



### Standard Specification

Type	6C SMD Crystal	
Frequency Range	3~34 MHz	27~100 MHz
Overtone Order	Fundamental	3rd Overtone
Load Capacitance	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, -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)



### Part ordering information

X	-6C	-27.000	-16	-10	-150	-C
	Series	Frequency	Load Capacitance	Tolerance	ESR	Temperature Range
		e.g	e.g	e.g	e.g	e.g
		27.000 = 27MHz	16 = 16pF	10 = 10ppm	150 = 150Ω	A= -10~+60°C B= -20~+70°C 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. Solderability: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-6C Series**  
**HC-49 SMD/SSMD Crystal**  
**Size: 12.7×4.8×4.0 / 3.0 [49SMD/49SSMD]**  
**3~100 MHz / 16~32 pF / 10~20ppm**

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