X-6Z Series

Seam Sealed SMD Crystal
Size:3×9mm / 3×10mm /2×6mm / 3×8mm
3.579~50 MHz / 12~20 pF / 10~30ppm

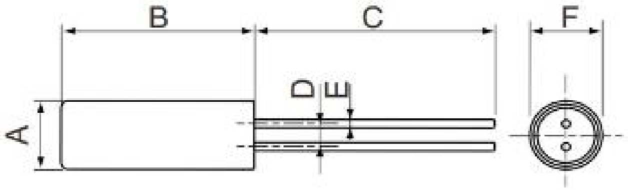
Features

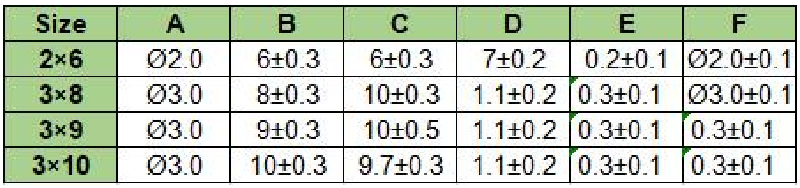
- Wide frequency range from 3.579MHz to 50MHz
- High shock tolerance
- Small size
- Reliable frequency stability
- Low power consuming
- Applications: IoT, Security, PC and Peripherals, Microprocessor Systems, Intrumentation, Automotive Electronics, etc

Standard Specification

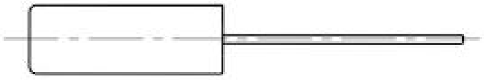
Type	6Z Cylindric Crystal	
Size	3×9mm / 3×10mm	2×6mm / 3×8mm
Frequency Range	3.579~4.0MHz	4.0~50MHz
Load Capacitance	12pF, 16pF, 20pF, or specify	
Drive Level	10~+100μW	
Frequency Tolerance	±10~±30ppm, or specify	
Insulation Resistance	500MΩ AT DC200V	
Series Resistance	40~180Ω (3.579~30MHz)	80Ω (30~50MHz)
Operating Temperature	-20~+70°C, -40~+85°C	
Storage Temperature	-40~+85°C	
Shunt Capacitance	5pF Typ.	
Aging (at 25°C)	±3ppm /Year Max.	
Packing Unit	1000pcs.	

Dimensions (mm)





Size	A	B	C	D	E	F
2×6	Ø2.0	6±0.3	6±0.3	7±0.2	0.2±0.1	Ø2.0±0.1
3×8	Ø3.0	8±0.3	10±0.3	1.1±0.2	0.3±0.1	Ø3.0±0.1
3×9	Ø3.0	9±0.3	10±0.5	1.1±0.2	0.3±0.1	0.3±0.1
3×10	Ø3.0	10±0.3	9.7±0.3	1.1±0.2	0.3±0.1	0.3±0.1



Part ordering information

X	-6Z	-4.000	-12	-10	-40	-C
	Series	Frequency	Load Capacitance	Tolerance	ESR	Temperature Range
		e.g	e.g	e.g	e.g	e.g
		4.000 = 4 MHz	12 = 12pF	10 = 10ppm	40 = 40Ω	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. 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

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