

Crystal Resonators

7M 6.9*1.4mm TUNING FORK WATCH CRYSTAL 32.768KHZ



SPECIFICATION

PN: KSE-7M32768KDY240ZA3

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FEATURE

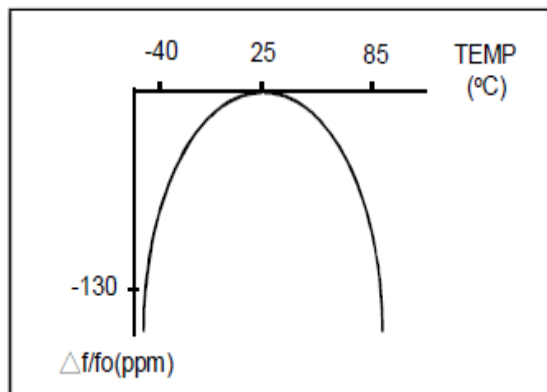
Ultra thin type with geight 1.4mm Max.
Application for Cellular phones ,PDA,Radio Communication
Equipment, and Portable Applications etc.
High reliable environmental performace.
RoHS compliant /Pb Free.

ELECTRICAL SPECIFICATIONS (电气参数)

Frequency	32.768KHz
Frequency Tolerance (at 25°C)	±20ppm
Load Capacitance(CL)	12.5PF
Equivalent Series Resistance(ESR)	65KΩ Max
Turnover Temperature	25 ± 5°C
Frequency Temperature Curve	-0.04ppm/°C² MAX
Operating Temperature Range	-40 °C to +85 °C
Storage Temperature Range	-40 °C to +85 °C
Shunt Capacitance (C0)	0.8pF Typ
Dynamic Capacitance (C1)	1.9fF Typ
Driver Level (Typical)	1μW Max
Insulation Resistance	500MΩ MIN at DC100V±15V
Aging @25°C 1st year (Max)	±3ppm/year max

REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE
CONFIRM WITH OUR SALES ENGINEER.

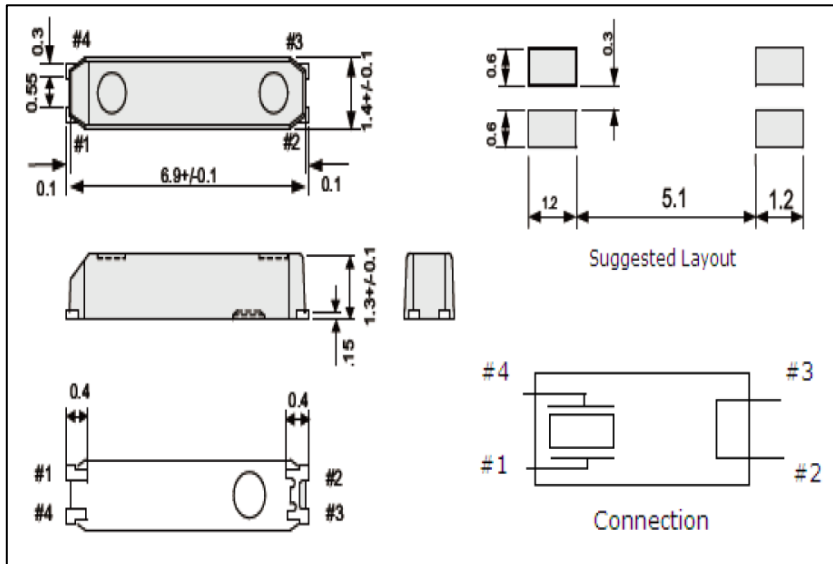
Frequency VS Temperature Curve



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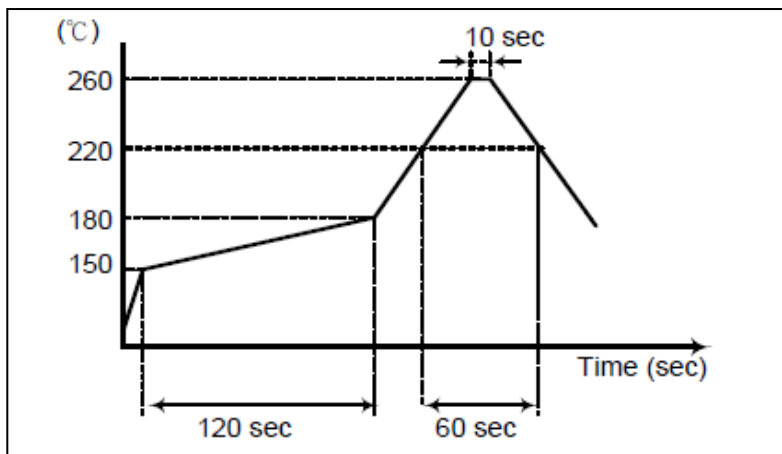
Dimension (尺寸) (Unit: mm)



Marking:

C3**C

REFLOW CONDITION (回流焊)



The reflow temperature profile may vary depending on the product model, specifications and frequency range. Refer to the individual product specifications for details

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RELIABILITY TEST SPECIFICATIONS (可靠性测试标准)

Test item	Equipment	Condition	Specification
1.SOLDERABILITY TEST	KSE-REL001、RC-328A	1.Solderability:235±5℃, 5±0.5S 2.Heat resistance:260±5℃,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℃±2℃,1000hr; Low temperature:-40℃±3℃,1000hrs	MIL-STD883C, METHOD 1011.8
7. TEMP &HUM CYCLING TEST	H-PTH-80CK CHAMBE, S&A 350B/250B	Temperature:-10℃±2℃~65℃±2℃,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&A350B/250B	Temperature:40℃±2, Humidity:85+3,-2%,Store 96 hrs	JIS C6701
9.AGING TEST	H-PTH-80CK CHAMBE, S&A350B/250	Temperature:40℃±2, Humidity:85+3,-2%,Store 96 hrs	JIS C5023