

# QUARTZ CRYSTAL UNIT



*SERIES 7I, SEAM SEALED CERAMIC 5 X 3.2mm Surface Mount Package*

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|              |
|--------------|
| Approved by: |
| Checked by:  |
| Issued by:   |

## SPECIFICATION

**MODEL: SJK-7I-24.00-18-30-60-B-30**

**深圳市晶科鑫实业有限公司**

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## FEATURE

- I Ultra thin, thickness 1.0mm
- I Leadless type
- I High precision characteristic covering up to high frequency range
- I Automatic mounting
- I Embossed taping specification
- I Suitable for Reflow soldering

## ELECTRICAL SPECIFICATIONS

|  |                  |
|--|------------------|
| Output Frequency Range                 | 24.00 MHz        |
| Mode                                   | AT/Fundamental   |
| Frequency Tolerance (at 25°C)          | ±30ppm           |
| Frequency Stability Over Operating     | ±30ppm           |
| Operating Temperature Range            | -20 °C to +70 °C |
| Storage Temperature Range              | -40 °C to +85 °C |
| Shunt Capacitance (C <sub>0</sub> )    | 5.0 PF Max       |
| Driver Level (Typical)                 | 100µW            |
| Load Capacitance(C <sub>L</sub> )      | 18 PF            |
| Equivalent Series Resistance ESR (Ω)   | 60 Ω Max         |
| Aging @25°C 1 <sup>st</sup> year (Max) | ±3ppm/year       |

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

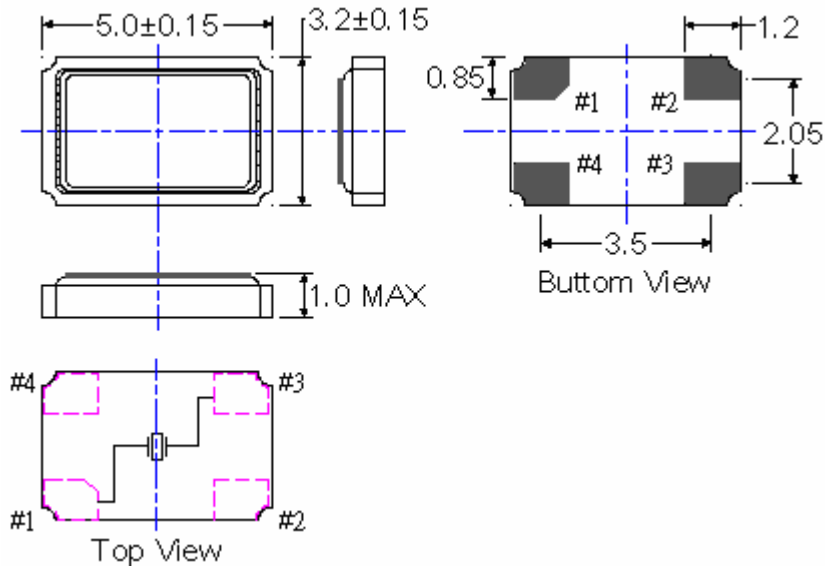
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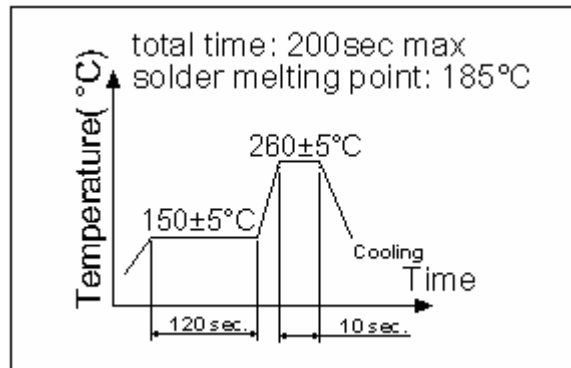


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## Dimension



## Reflow Condition



## Part Number

|         |                           |   |  |                                      |  |   |
|---------|---------------------------|---|--|--------------------------------------|--|---|
| SJK-7I- | 24.00                     | 18                                      | 30                                     | 60                                   | B  | 30  |
|         | Frequency<br>24.00<br>MHz | Load<br>capacitance<br>18pf<br>s:series | Frequency<br>tolerance<br>$\pm 30$ ppm | E.S.R.max<br>e.g.<br>60 $\Omega$ max | operating<br>temperature<br>range<br>A:-10-60 $^{\circ}\text{C}$<br>B:-20-70 $^{\circ}\text{C}$<br>C:-40-85 $^{\circ}\text{C}$ | temperature<br>stability:<br>$\pm 30$ ppm |

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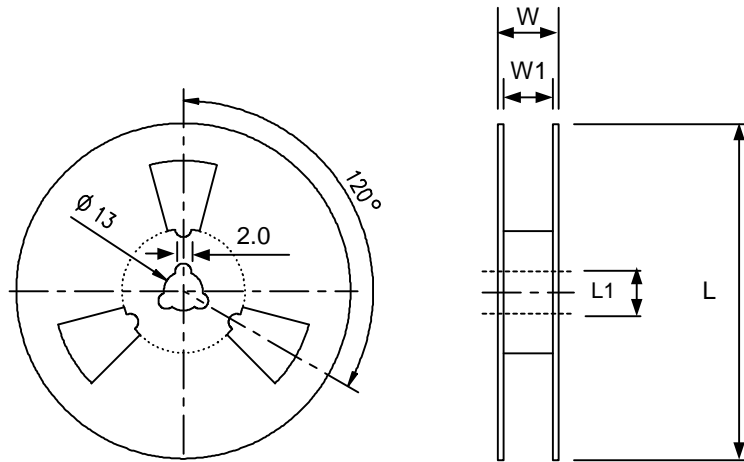
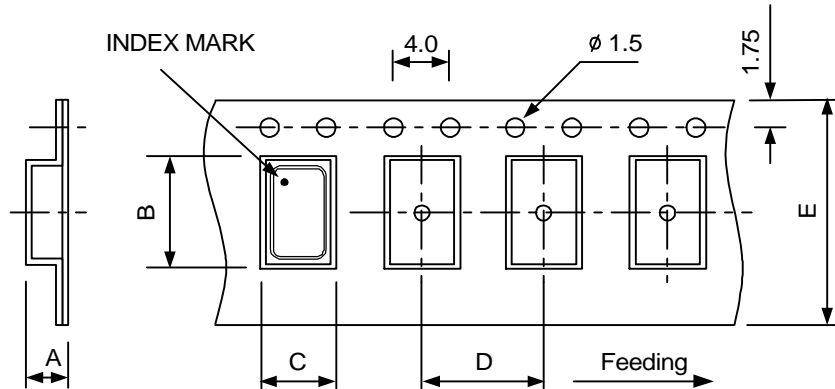
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## PACKING



| DIMENSIONS |      | A    | B    | C   | D   | E   | L   | L1  | W    | W1   | pcs / Reel |
|------------|------|------|------|-----|-----|-----|-----|-----|------|------|------------|
|            | 7050 |      | 2.15 | 7.9 | 5.4 | 8.0 | 16  | 180 | 13   | 21.5 | 17.5       |
| 6035       |      | 1.4  | 6.4  | 3.9 | 8.0 | 12  | 180 | 13  | 15.4 | 13   |            |
| 5032       |      | 1.46 | 5.5  | 3.6 | 8.0 | 12  | 180 | 13  | 15.4 | 13   |            |
| 4025       |      | 1.5  | 4.4  | 8.0 | 2.8 | 13  | 176 | 13  | 13.5 | 12   |            |
| 3225       |      | 1.4  | 3.4  | 2.7 | 4   | 8   | 178 | 13  | 11.5 | 8    |            |

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**SERIES 7I, SEAM SEALED CERAMIC 5 X 3.2mm Surface Mount Package**

## RELIABILITY TEST SPECIFICATION

| Test item                                  | Equipment   | Condition   | Specification                  |
|--|---|---|--------------------------------|
| 1. SOLDERABILITY TEST                      | TBAEI ESPEC(K-1425-14D)                                       | Welding can be temperature: $260 \pm 5$ °C, 5' s( $125$ °C, 120 SEC preheating<br>Anti-welding temperature: $260 \pm 5$ °C,<br>soaking time: 10 seconds | MIL-STD-883E Method<br>2003.7  |
| 2. HERMETICITY TEST                        | Helium leak detectors   | 1. Small leak: 4.5 KGF/CM2 2hours1 *<br>10-9-9 PA.M3/SEC crude leak:<br>4. 5KGF/CM2 2hours1.5 * 10-5 PA.M3/SEC  | MIL-STD-883E Method<br>1014.10 |
| 3. VIBRATION TEST                          | Sweep vibration test machines (IMV CO. (VS-300-2)), S & A250B | 1 Crystal on 10-2000 Hz, X, Y, Z water level, each 20-minute vibration, a test every four hours, then the sample used to test 250 b                     | MIL-STD-883E Method<br>2007.3  |
| 4. MECHANICAL SHOCK                        | TOOL  | A high degree of crystal from 150 CM to 150 g of three months from the direction of impact XYZ3 work hard wooden board                                  | JIS C6701                      |
| 5. MECHANICAL IMPACT TEST                  | TOOL  | c1000G, 0.5Msec, 3, from the X, Y, Z three-day direction of hard wood boards, then the sample used to test 250 B  | MIL-STD-202F Method 213B       |
| 6. DROP TEST                               | Fell hard wood equipment, S & A 250B                          | Crystal 75 cm in height, falling three times in the hard wooden board   | JIS C6701                      |
| 7. SALT SPRAY                              | H-SST-60、RC-328A  | 5% NaCL (sodium carbonate), $35$ °C $\pm$ 2 °C temperature of the box, 48 hours, PH value: 6.5 to 7.2   |                                |
| 8. HIGH&LOW TEMP STORAGE TEST(Static test) | TABEL ESPEC(MC-810), S&A 350B/250B                            | High temperature: $125$ °C $\pm$ 2 °C, 500 hours; low temperature: $-40$ °C $\pm$ 3 °C, 500hours  | MIL-STD-883E Method<br>1005.8  |
| 9. TEMP & HUM CYCLING TEST                 | TABEI ESPEC (TPC-211) S&A350B/250B                            | Temperature: $121 + / -3$ °C RH100% 2BAI, 240hours  | JIS C6701                      |
| 10. HIGH TEM. & HUM. STORAGE TEST          | TBAEL ESPEC (PH-3F) , S&A350B/250B                            | Temperature: $40$ °C $\pm$ 2, Humidity: 85 +3, -2%, storage 96 hours  | JIS C5023                      |
| 11. AGING TEST                             | PRA(2360)   | Temperature: $85$ °C $\pm$ 3 °C, 1000hours  | JIS C6701                      |

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