

# Quartz Crystal



**SERIES 6I GLASS SEALED CERAMIC5\*3.2mm 2PAD SURFACE MOUNT PACKAGE**

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

# SPECIFICATION

**MODEL: SJK-6I-12.00-16-30-60-F-B-30**

**深圳市晶科鑫实业有限公司**  
**SHENZHEN CRYSTAL TECHNOLOGY INDUSTRIAL CO., LTD.**

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### FEATURE

- I Ultra thin,thickness 1.0mm
- I Leadiess. type
- I High precision characteristic covering up high frequency range.
- I Automatic mounting
- I Emboss taping specification.
- I Suitable for reflow soldering
- I Available on tape and reel ,1000pcs per reel

### APPLICATIONS

- I Ideally suited designed for disc drives, NB,PCs and hand-held electronic products

### ELECTRICAL SPECIFICATIONS

|  |  |
|--|--|
| Output Frequency Range   | 12.00MHz   |
| Mode   | Fundamental / AT   |
| Frequency Tolerance (at 25°C)                                  | ±30ppm   |
| Frequency Stability Over Operating Temperature Characteristics | ±30ppm   |
| Storage Temperature Range                                      | -40 °C to +85 °C   |
| Operating Temperature Range                                    | -20 °C to + 70 °C  |
| Shunt Capacitance (C <sub>0</sub> )                            | 5.0 pF Max   |
| Driver Level (Typical)   | 10μW   |
| Load Capacitance(C <sub>L</sub> )                              | 16pF   |
| Equivalent Series Resistance ESR (Ω)                           | 60Ω  |
| Aging @25°C 1 <sup>st</sup> year (Max)                         | ±3ppm/year   |
| Shock Resistance   | Drop test of 3 times on 2mm stainless plate from 75cm height |

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

### PART NUMBER

|      |           |   |  |   |  |   |                                |   |   |   |   |
|------|-----------|---|--|---|--|---|--------------------------------|---|---|---|---|
| SJK- | 12.00M    | — | 16   | — | 30   | — | 60                             | — | B   | — | 30  |
| 6I-  | Frequency |   | Load capacitance<br>e.g.<br>16: 16pf<br>s:series |   | Frequency tolerance<br>e.g.<br>30:<br>±30ppm |   | E.S.R.max<br>e.g.<br>60:60Ωmax |   | Operating temperature range<br>A:-10-60°C<br>B:-20-70°C<br>C:-40-85°C |   | Temperature stability:<br>e.g.<br>30:±30ppm |

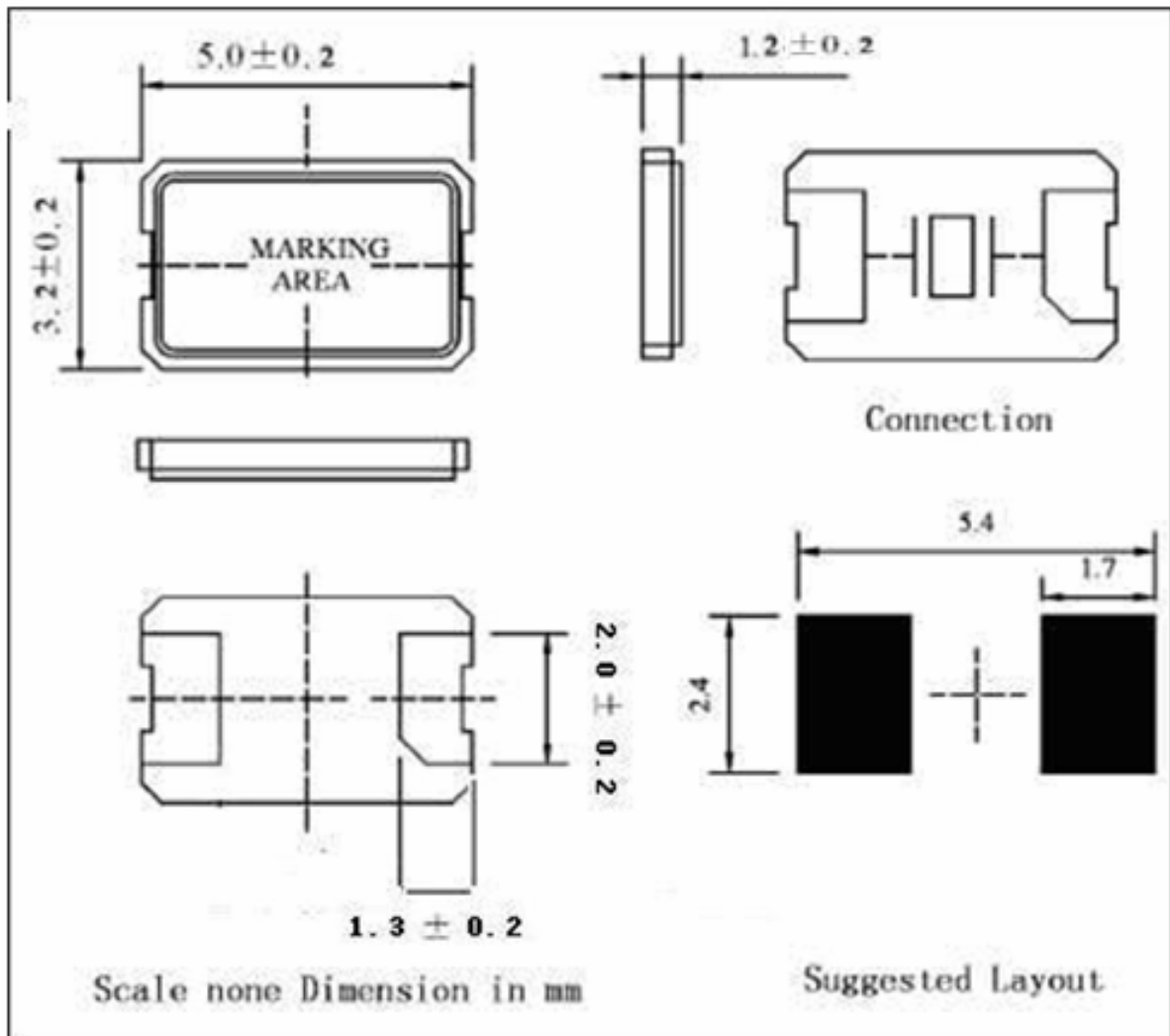
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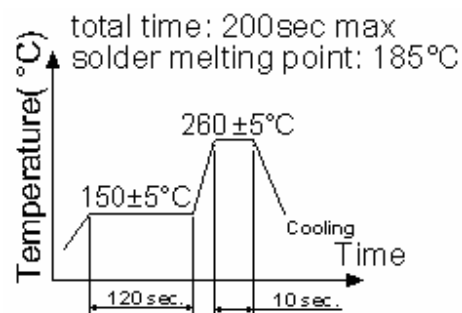


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### Dimension



### Reflow Condition



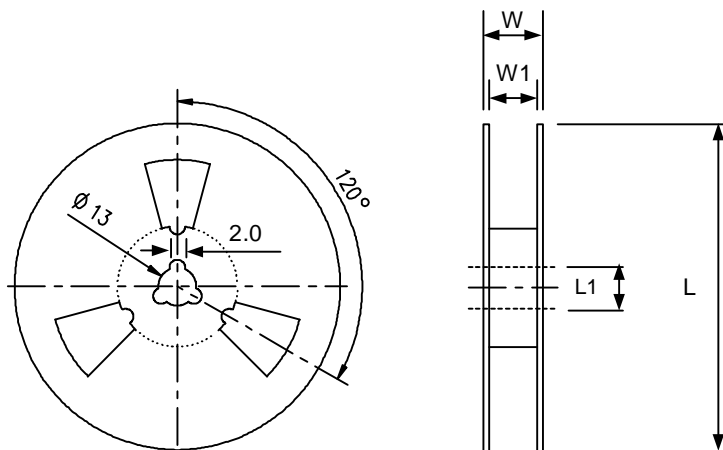
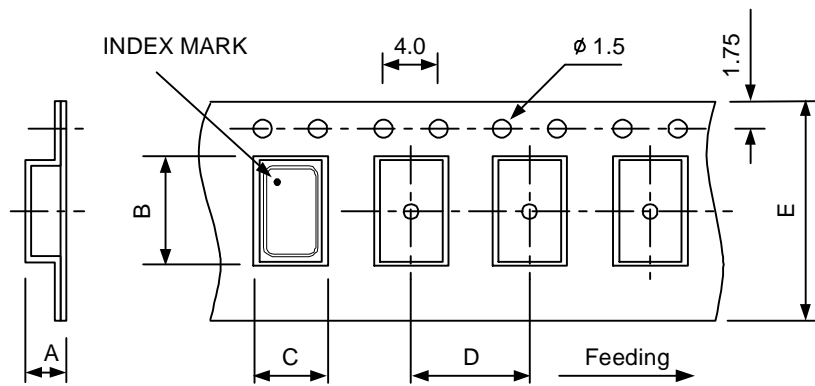
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### PACKING



| 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       | 1K |
|            | 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         |    |
|            | 3225 | 1.4  | 3.4 | 2.7 | 4   | 8  | 178 | 13 | 11.5 | 8          | 3k |

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### 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, 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: 4.5KGF/CM2<br>2hours1.5 * 10-5 PA.M3/SEC                                     | MIL-STD-883E Method<br>1014.10 |
| 3. VIBRATION TEST                 | Sweep vibration test machines (1MV 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 directions from the direction of impact X.Y.Z3 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<br>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     | 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                      |
| 11AGING TEST                      | PRA(2360)   | Temperature: 85 °C $\pm$ 3 °C, 1000hours  | JIS C6701                      |