# **Quartz Crystal**



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

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

# **SPECIFICATION**

MODEL: SJK-6I-16.00-18-30-60-F-B-30

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

Add: RM#1805, East Wing, Tian An Hi-tech Plaza Phase 2, Tian An Cyber Park Shenzhen, China

Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718 88352499

E-mail: jolly@q-crystal.com HTTP://www.q-crystal.com

Page 1 of 5

# **Quartz Crystal**



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

#### **FEATURE**

- I Uitra 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
- 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   | 16.00MHz   |  |  |  |
|--|--|--|--|--|
| 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> )                              | 18pF   |  |  |  |
| 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- | 16.00M    | <del>-</del> 18 | <b>—</b> 30 | <b>—</b> 60 | — В         | <b>—</b> 30 |
|------|-----------|-----------------|-------------|-------------|-------------|-------------|
| 6l-  | Frequency | Load            | Frequency   | E.S.R.max   | Operating   | Temperature |
|      |           | capacitance     | tolerance   | e.g.        | temperature | stability:  |
|      |           | e.g.            | e.g.        | 60:60Ωmax   | range       | e.g.        |
|      |           | 18: 18pf        | 30:         |             | A:-10-60°C  | 30:±30ppm   |
|      |           | s:series        | ±30ppm      |             | B:-20-70℃   |             |
|      |           |                 |             | <u> </u>    | C:-40-85℃   |             |

Add: RM#1805, East Wing, Tian An Hi-tech Plaza Phase 2, Tian An Cyber Park Shenzhen, China

Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718 88352499

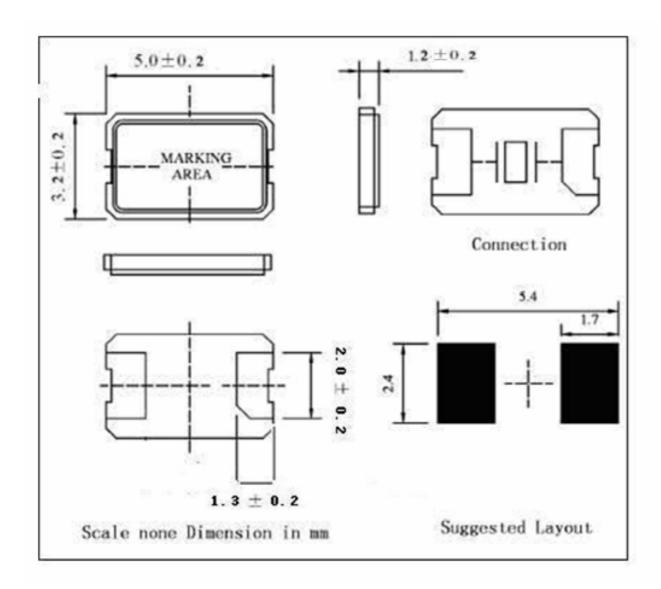
E-mail: jolly@q-crystal.com HTTP://www.q-crystal.com

# **Quartz Crystal**

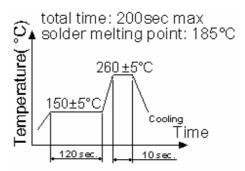


# SERIES 6I GLASS SEALED CERAMIC5\*3.2mm 2PAD SURFACE MOUNT PACKAGE

#### **Dimension**



### **Reflow Condition**



Add: RM#1805, East Wing, TianAn Hi-tech Plaza Phase2, TianAn Cyber Park Shenzhen, China

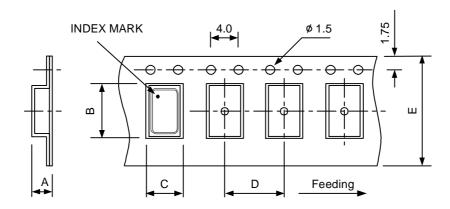
Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718 88352499

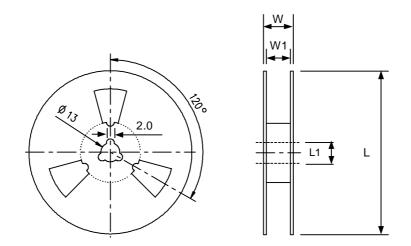
E-mail: jolly@q-crystal.com HTTP://www.q-crystal.com

Page 3 of 5



### **PACKING**





|            |      | Α    | В   | С   | D   | Е  | L   | L1 | W    | W1   | pcs / Reel |
|------------|------|------|-----|-----|-----|----|-----|----|------|------|------------|
|            | 7050 | 2.15 | 7.9 | 5.4 | 8.0 | 16 | 180 | 13 | 21.5 | 17.5 | 1K         |
| DIMENSIONS | 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         |
|            |      |      |     |     |     |    |     |    |      |      |            |

Add: RM#1805, East Wing, Tian An Hi-tech Plaza Phase 2, Tian An Cyber Park Shenzhen, China

Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718 88352499

E-mail: jolly@q-crystal.com HTTP://www.q-crystal.com
Page 4 of 5



# Quartz Crystal SERIES 61 GLASS SEALED CERAMIC5\*3.2mm 2PAD SURFACE MOUNT PACKAGE

# RELIABILITY TEST SPECIFICATION

| Test item                            | Equipment  | Condition  | Specification                  |  |  |
|--------------------------------------|--|--|--------------------------------|--|--|
| 1. SOLDERABI LI TY<br>TEST           | TBAEI ESPEC(K-1425-14D)  | Welding can be temperature: 260 $\pm$ 5 $^{\circ}\text{C}$ , 5's(125 $^{\circ}\text{C}$ , 120 SEC preheating Anti-welding temperature: 260 $\pm$ 5 $^{\circ}\text{C}$ , 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 * 10-9-9 PA.M3/SEC crude leak: 4.5KGF/CM2 2hours1.5 * 10-5 PA.M3/SEC  | MIL-STD-883E Method<br>1014.10 |  |  |
| 3. VIBRATION TEST                    | Sweep vibration test<br>machines (IMV CO. (VS-300-<br>2)), S & A250B | 1 Crystal on 10-2000 Hz, X, Y, Z water<br>level, each 20-minute vibration, a test<br>every four hours, then the sample used<br>to test 250 b   | MIL-STD-883E Method<br>2007.3  |  |  |
| 4. MECHANICAL<br>SHOCK               | T00L   | A high degree of crystal from 150 CM to<br>150 g of three directions from the<br>direction of impact X.Y.Z3 work hard<br>wooden board  | JIS C6701                      |  |  |
| 5. MECHANI CAL<br>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<br>& 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 $^{\circ}\mathrm{C}~\pm~2$ $^{\circ}\mathrm{C}$ temperature of the box, 48 hours, PH value: 6.5 to 7.2  |                                |  |  |
| 8. HIGH&LOW TEMP<br>STORAGE TEST     | TABEL ESPEC(MC-810), S&A<br>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)<br>S&A350B/250B                                | Temperature: 121 + / -3 ℃ RH100% 2BAI, 240hours  | JIS C6701                      |  |  |
| 10. HIGH TEM. &<br>HUM. STORAGE TEST | TBAEL ESPEC (PH-3F) ,<br>S&A350B/250B                                | Temperature: 40 °C $\pm$ 2, Humidity: 85 +3, -2%, storage 96 hours   | JIS C5023                      |  |  |
| 11AGING TEST                         | PRA(2360)  | Temperature: 85 $^{\circ}$ C $\pm$ 3 $^{\circ}$ C, 1000hours   | JIS C6701                      |  |  |

Add: RM#1805, East Wing, Tian An Hi-tech Plaza Phase 2, Tian An Cyber Park Shenzhen, China 88352499

Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718

E-mail: jolly@q-crystal.com HTTP://www.q-crystal.com Page 5 of 5