



INTERQUIP ELECTRONICS CO., LIMITED

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Crystal Resonator Specification and Approval Sheet

Customer: Apex Electronics

Project Name: N/A

Applications: N/A

Contact Person: N/A

Customer Part Number: N/A

1. Scope:

1.1 This specification applies to quartz crystal unit with a frequency of 9.830400MHz, which will be used in crystal oscillator applications.

2. Construction:

2.1 Type of Holder: SMCE-5032 (RoHS Compliant)

2.2 Enclosure Seal: Seam Weld

3. Characteristics:

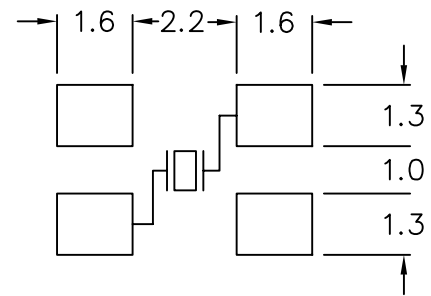
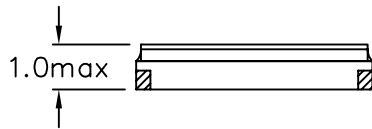
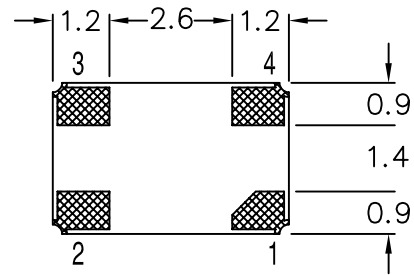
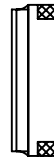
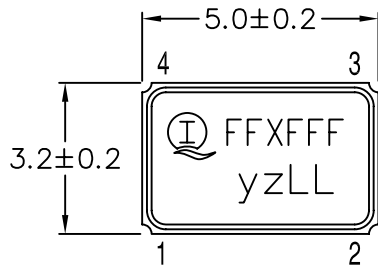
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|------|--------------------------------------|---------------------|----------------------------|
| 3.1 | Nominal Frequency | (f) | 9.830400MHz |
| 3.2 | Mode of Vibration | | Fundamental |
| 3.3 | Load Capacitance | (C _L) | 18pF |
| 3.4 | Frequency Tolerance at 25°C±3°C | (Δf/f) | ±30 ppm |
| 3.5 | Resonance Resistance | (Ω) | 100 Ohm Max. |
| 3.6 | Shunt Capacitance | (C ₀) | 7.0pF Max. |
| 3.7 | Drive Level | (D _L) | 100uW |
| 3.8 | Frequency Deviation with Temperature | (Δf/f) | ±30 ppm |
| 3.9 | Operating Temperature Range | (T _{OPR}) | -20°C to +70°C |
| 3.10 | Storage Temperature Range | (T _{STG}) | -55°C to +125°C |
| 3.11 | Insulation Resistance | (SR) | 500MΩ or more |
| 3.11 | Aging | (Δf/f) | ±5ppm per year Max. |

4. Special Requirements:

No special requirement is needed

| | | | | | | | |
|------|--------------------|----|--------------------|--------------------------------|---------------------------|----------------|----------------------|
| | | | | TITLE CRYSTAL RESONATOR | | DWG. | M Zhao |
| | | | | | | DATE | 11-04-28 |
| | | | | PART NO | 5XAA09830183KFA0Q3 | TOLERANCE | CHKD. J Mok |
| | | | | MODEL | SMCE-5032 | X.± X.X± | DATE 11-04-28 |
| | | | | REMARK | | X.XX± ANGULAR± | APPD. XM Sun |
| | | | | | | DATE | 11-04-28 |
| DATE | MODIFY DESCRIPTION | BY | SALESMAN Gary Chan | SHEET | | 1/2 | REV 0 |

EXTERNAL DIMENSIONS



RECOMMENDED SOLDERING PATTERN

MARKING SPECIFICATIONS

— COMPANY'S LOGO

FF FFF — REPRESENT FREQUENCY (MHz)

X — REPRESENT PRODUCTION LINE CODE

YZ — REPRESENT MONTH & YEAR CODE RESPECTIVELY

" Y " :

| | | | | | | | | | | | | |
|-------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|
| MONTH | Jan | Feb | Mar | Apr. | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| MARK | A | B | C | D | E | F | G | H | J | K | L | M |

" Z " CODE IS THE LAST NUMBER OF PRODUCTION YEAR

FOR INSTANCE:

| | | | | | |
|------|------|------|------|------|------|
| YEAR | 2008 | 2009 | 2010 | 2011 | 2012 |
| MARK | 8 | 9 | 0 | 1 | 2 |

LL — REPRESENT LOT CODE (AA-ZZ)

2. DO NOT SCALE DRAWING

NOTES: 1. ALL DIMENSIONS ARE IN MM



Interquip Electronics Co., Ltd

| | | | | | | |
|------|--------------------|----|------------------------|--|-------|-------------|
| | | | TITLE SMD RESONATOR | | DWN. | M Zhao |
| | | | PART NO. | | DATE | 2009.3.10 |
| | | | MODEL SMCE-5032 | | CHKD | Johnson Mok |
| | | | REMARK | | DATE | 2009.3.10 |
| | | | | | APPD. | XM.Sun |
| | | | | | DATE | 2009.3.10 |
| DATE | MODIFY DESCRIPTION | BY | DWG.NO. 004-06187-000 | | | REV.0 |