



INTERQUIP ELECTRONICS CO., LIMITED

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Crystal Resonator Specification and Approval Sheet

Customer: RS COMPONENTS

Project Name: N/A

Applications: N/A

Contact Person: N/A

Part Number: N/A

1. Scope:

1.1 This specification applies to quartz crystal unit with a frequency of 16.384000MHz which will be used in crystal oscillator applications.

2. Construction:

2.1 Type of Holder: SMAC-3225B (4 solder pads)

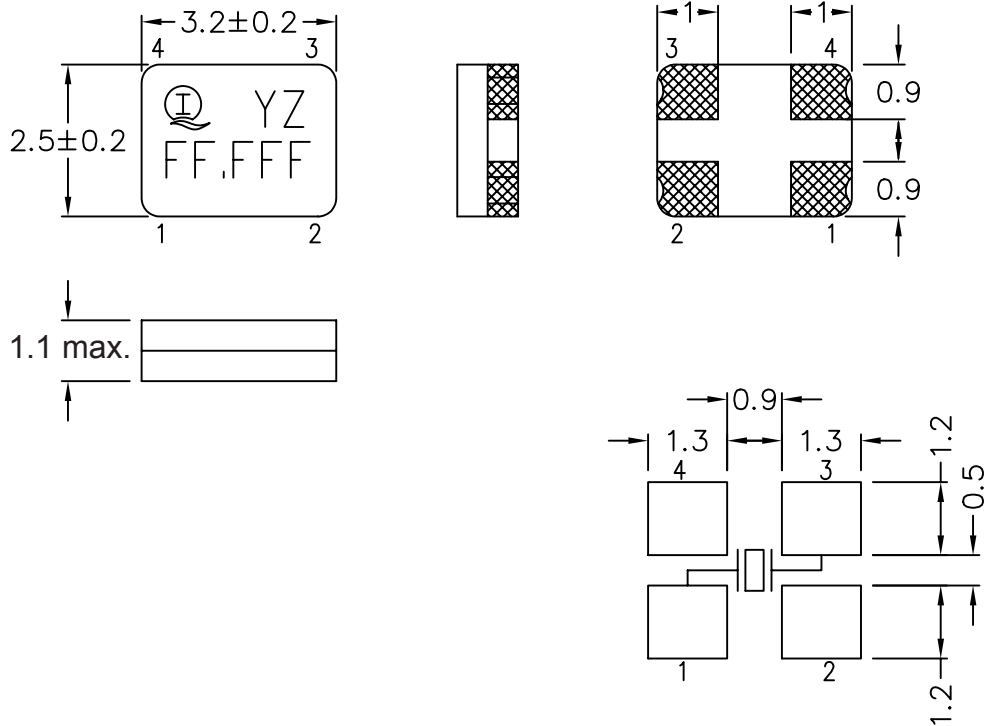
2.2 Enclosure Seal: Epoxy Resin Hermetic Seal (RoHS Compliant)

3. Characteristics:

| | | | |
|------|--------------------------------------|---------------------|-----------------------------|
| 3.1 | Nominal Frequency Range | (f) | 16.384000MHz |
| 3.2 | Mode of Vibration | | Fundamental |
| 3.3 | Load Capacitance | (C _L) | 12pF |
| 3.4 | Frequency Tolerance at 25 °C±3 °C | (Δ f/f) | ±30ppm |
| 3.5 | Resonance Resistance | (Ω) | 120 Ohms Max. |
| 3.6 | Shunt Capacitance | (C ₀) | 7pF Max. |
| 3.7 | Drive Level | (D _L) | 0.1mW |
| 3.8 | Frequency Deviation with Temperature | (Δ f/f) | ±30ppm |
| 3.9 | Operating Temperature Range | (T _{OPR}) | -40°C to 85°C |
| 3.10 | Storage Temperature Range | (T _{STG}) | -55°C to 125°C |
| 3.11 | Insulation Resistance | (SR) | 500M Ω or More |
| 3.12 | Aging | (Δ f _A) | ±5 ppm per Year Max. |

| | | | | | | | | | |
|-------|--------------------|----|-------------------|---------------------------|-----------|----------|------------|------------------|----------|
| TITLE | | | | CRYSTAL RESONATOR | | | DWG. | M Zhao | |
| | | | | | | | DATE | 11-01-11 | |
| P/N: | | | | 5YEA16384123TFA2Q3 | TOLERANCE | | CHKD. | Cs Chiang | |
| MODEL | | | | SMAC-3225B | X± | X.X± | DATE | 11-01-11 | |
| | | | | | X.XX± | ANGULAR± | APPD. | XM Sun | |
| | | | | | | | DATE | 11-01-11 | |
| DATE | MODIFY DESCRIPTION | BY | SALES : Gary Chan | | | SHEET | 1/2 | REV | 0 |

EXTERNAL DIMENSIONS



MARKING SPECIFICATIONS

RECOMMENDED SOLDERING PATTERN

— INTERQUIP COMPANY'S LOGO

FF.FFF — REPRESENT FREQUENCY (MHz)

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 | 2009 | 2010 | 2011 | 2012 | 2013 |
| MARK | 9 | 0 | 1 | 2 | 3 |

2. DO NOT SCALE DRAWING

NOTES: 1. ALL DIMENSIONS ARE IN MM



Interquip Electronics Co., Ltd

| | | | | | | | |
|----------|--------|-------------|----|-----------------------|--|--------|-------------|
| TITLE | | | | SMD RESONATOR | | DWN. | M Zhao |
| | | | | | | DATE | 2009.9.18 |
| PART NO. | | | | | | CHKD | Johnson Mok |
| MODEL | | | | SMAC-3225 | | DATE | 2009.9.18 |
| REMARK | | | | | | APPD. | Xm_Sun |
| | | | | | | DATE | 2009.9.18 |
| DATE | MODIFY | DESCRIPTION | BY | DWG.NO. 004-061J7-008 | | REV. 1 | |