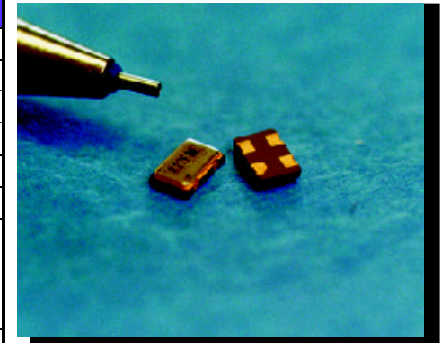




### SERIES COM2

- **FEATURES**
  - ULTRA SMALL PACKAGE
  - AVAILABLE FROM 1.8 VDC TO 5.0 VDC
  - ENABLE/DISABLE FUNCTION
- **SPECIFICATIONS**

| SERIES                      |                    | COM2 (3.3 AND 5.0 Vcc) †                                                                                                                            | COM2 (3.3 Vcc AND BELOW) †                                                 |
|-----------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| FREQUENCY RANGE†            |                    | 1.544 MHz TO 156.000 MHz                                                                                                                            | 2.500 MHz TO 55.000 MHz                                                    |
| FREQUENCY STABILITY††       |                    | ±25 PPM, ±30 PPM, ±50 PPM, ±100 PPM                                                                                                                 | ±10 PPM, ±15 PPM, ±20 PPM, ±25 PPM                                         |
| OPERATING TEMPERATURE RANGE |                    | -10°C TO +70°C (STANDARD)                                                                                                                           | -10°C TO +70°C (STANDARD)                                                  |
|                             |                    | -40°C TO +85°C (EXTENDED)                                                                                                                           | -40°C TO +85°C (EXTENDED)                                                  |
| STORAGE TEMPERATURE RANGE   |                    | -55° C TO +125° C                                                                                                                                   | -40°C TO +85°C                                                             |
| INPUT                       | VOLTAGE            | +1.8 TO +5 VDC ± 10% †                                                                                                                              |                                                                            |
|                             | CURRENT (MAX)      | 1.544 MHz TO 9.99 MHz: 15 mA MAX<br>10.00 MHz TO 34.999 MHz: 20 mA MAX<br>35.00 MHz TO 49.999 MHz: 35 mA MAX<br>50.00 MHz TO 156.000 MHz: 40 mA MAX | 7 mA MAX                                                                   |
| OUTPUT                      | SYMMETRY           | 40% TO 60% AT 0.5*Vcc (NORMAL)<br>45% TO 55% AT 0.5*Vcc (TIGHT)                                                                                     | 40% TO 60% AT 0.5*Vcc (NORMAL)<br>45% TO 55% AT 0.5*Vcc (TIGHT)            |
|                             | RISE AND FALL TIME | 10 ns MAX                                                                                                                                           | 5 ns MAX                                                                   |
|                             | LOGIC "0" LEVEL    | Vcc * 0.1 V MAX                                                                                                                                     | Vcc * 0.1 V MAX                                                            |
|                             | LOGIC "1" LEVEL    | Vcc * 0.9 V MIN                                                                                                                                     | Vcc * 0.9 V MIN                                                            |
|                             | LOAD               | CMOS 15 pF                                                                                                                                          | CMOS 15 pF                                                                 |
| ENABLE/DISABLE FUNCTION     |                    | PIN 1: HIGH OR OPEN PIN 3: OSCILLATION<br>PIN 1: LOW PIN 3: HIGH IMPEDANCE                                                                          | PIN 1: HIGH OR OPEN PIN 3: OSCILLATION<br>PIN 1: LOW PIN 3: HIGH IMPEDANCE |
| ENABLE/DISABLE TIME         |                    | 100 ns MAX                                                                                                                                          | 100 ns MAX                                                                 |
| STANDBY CURRENT             |                    | 100 µA MAX                                                                                                                                          | 10 µA MAX                                                                  |

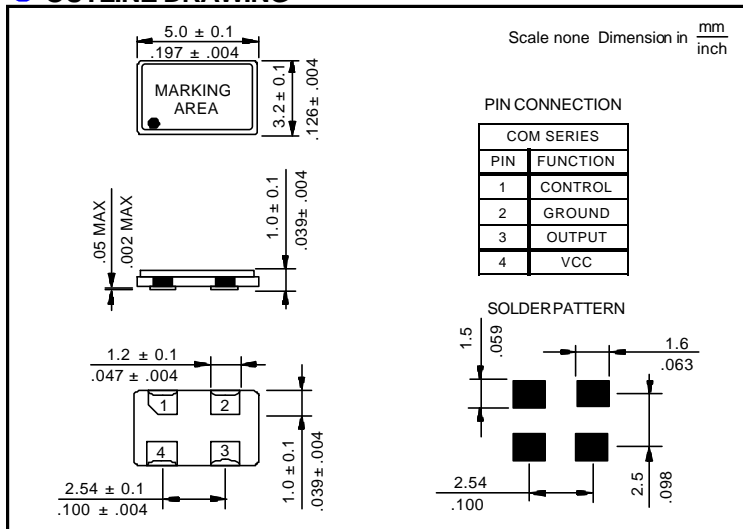


### ● ENVIRONMENTAL

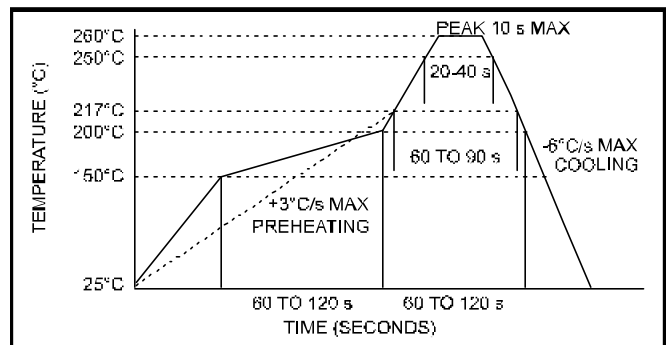
| PARAMETER                  | VALUE     |
|----------------------------|-----------|
| MOISTURE SENSITIVITY LEVEL | 1         |
| REACH-SVHC                 | COMPLIANT |
| RoHS                       | 6/6       |
| TERMINATION FINISH         | Au        |

† NOT ALL COMBINATIONS OF FREQUENCY AND VOLTAGE ARE AVAILABLE, CONTACT SALES AT [sales@rubyquartz.com](mailto:sales@rubyquartz.com)  
 †† INCLUSIVE OF 25°C TOLERANCE, OPERATING TEMPERATURE RANGE, VOLTAGE OR LOAD CHANGES, AGING, SHOCK AND VIBRATION

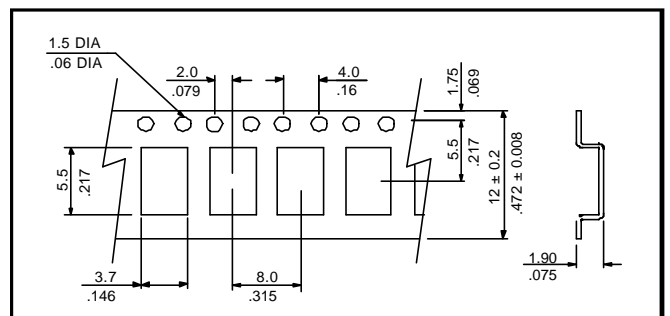
### ● OUTLINE DRAWING



### ● REFLOW SOLDERING PROFILE



### ● CARRIER TAPE DIMENSIONS



### ● PACKAGING

178 mm REEL DIAMETER, 12mm TAPE WIDTH, 8mm PITCH  
 QUANTITY: 1000 PIECES PER REEL

### ● PART NUMBERING SYSTEM

| SERIES | INPUT VOLTAGE † |         | FREQUENCY STABILITY † |          | FREQUENCY | EXTENDED TEMPERATURE |                           | TIGHT SYMMETRY |                         | TAPE AND REEL |
|--------|-----------------|---------|-----------------------|----------|-----------|----------------------|---------------------------|----------------|-------------------------|---------------|
|        |                 |         |                       |          |           |                      |                           |                |                         |               |
| COM2   | 5               | 5.0 VDC | 10                    | ±100 PPM | IN MHZ    | EXT                  | EXTENDED (-40°C to +85°C) | T              | TIGHT SYMMETRY (45-55%) | TR            |
|        | 3               | 3.3 VDC | 05                    | ±50 PPM  |           |                      |                           |                |                         |               |
|        | 30              | 3.0 VDC | 03                    | ±30 PPM  |           |                      |                           |                |                         |               |
|        | 28              | 2.8 VDC | 025                   | ±25 PPM  |           |                      |                           |                |                         |               |
|        | 25              | 2.5 VDC | 02                    | ±20 PPM  |           |                      |                           |                |                         |               |
|        | 18              | 1.8 VDC | 015                   | ±15 PPM  |           |                      |                           |                |                         |               |
|        |                 | 01      | ±10 PPM               |          |           |                      |                           |                |                         |               |

EXAMPLE: COM2503-32.000-TR