

### SERIES COM1

#### FEATURES

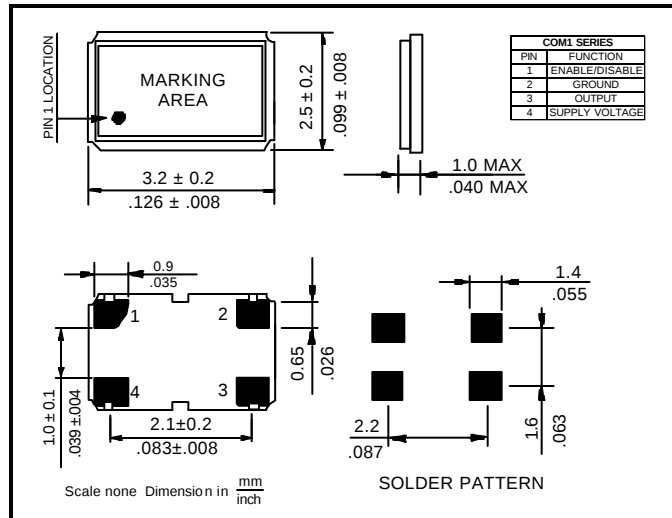
- ULTRA SMALL PACKAGE OF 3.2 x 2.5 x 1.0mm TYPICAL
- LOW SUPPLY VOLTAGE OF 1.8 AND 2.5 VDC AVAILABLE
- STANDBY FUNCTION
- LEAD FREE / RoHS COMPLIANT

#### SPECIFICATIONS

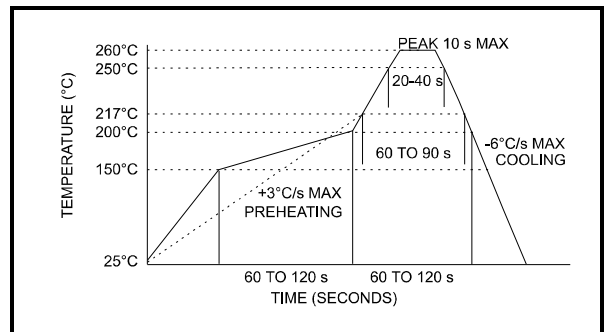
| SERIES                      |                  | COM118                                                                                                 | COM125                                                                                                 | COM13                                                                                                   |
|-----------------------------|------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| FREQUENCY RANGE             |                  | 1.544 MHz TO 60.000 MHz                                                                                |                                                                                                        |                                                                                                         |
| FREQUENCY STABILITY **      |                  | COM11810 : ±100 ppm                                                                                    | COM12510 : ±100 ppm                                                                                    | COM1310 : ±100ppm                                                                                       |
|                             |                  | COM11805 : ±50 ppm                                                                                     | COM12505 : ±50 ppm                                                                                     | COM1305 : ±50ppm                                                                                        |
|                             |                  | COM118025 : ±25 ppm                                                                                    | COM125025 : ±25 ppm                                                                                    | COM13025 : ±25ppm                                                                                       |
| OPERATING TEMPERATURE RANGE |                  | -10°C TO +70°C (-40°C TO +85°C AVAILABLE)                                                              |                                                                                                        |                                                                                                         |
| STORAGE TEMPERATURE RANGE   |                  | -55° C TO +125° C                                                                                      |                                                                                                        |                                                                                                         |
| INPUT                       | VOLTAGE          | +1.8 VDC ±5%                                                                                           | +2.5 VDC ±5%                                                                                           | +3.3 VDC ±10%                                                                                           |
|                             | CURRENT (MAX)    | 1.544 MHz TO 9.99MHz: 5 mA MAX<br>10.00 MHz TO 31.99 MHz: 6 mA MAX<br>32.00 MHz TO 60.00 MHz: 15mA MAX | 1.544 MHz TO 9.99MHz: 6 mA MAX<br>10.00 MHz TO 31.99 MHz: 8 mA MAX<br>32.00 MHz TO 60.00 MHz: 20mA MAX | 1.544 MHz TO 9.99MHz: 7 mA MAX<br>10.00 MHz TO 31.99 MHz: 10 mA MAX<br>32.00 MHz TO 60.00 MHz: 20mA MAX |
|                             | SYMMETRY         | 40 TO 60% AT 50% VDD (45 TO 55% AVAILABLE)                                                             |                                                                                                        |                                                                                                         |
| OUTPUT                      | RISE / FALL TIME | 5 ns MAX                                                                                               |                                                                                                        | 20 ns MAX                                                                                               |
|                             | LOGIC "0" LEVEL  | VCC X 0.1 V MAX                                                                                        |                                                                                                        |                                                                                                         |
|                             | LOGIC "1" LEVEL  | VCC X 0.9 V MIN                                                                                        |                                                                                                        |                                                                                                         |
|                             | LOAD             | 15 pF (HCMOS)                                                                                          |                                                                                                        |                                                                                                         |
| ENABLE/DISABLE FUNCTION     |                  | PIN 1: HIGH OR OPEN PIN 3: OSCILLATION<br>PIN 1: LOW PIN 3: HIGH IMPEDANCE                             |                                                                                                        |                                                                                                         |
| START UP TIME               |                  | 10 ms MAX                                                                                              |                                                                                                        |                                                                                                         |
| STANDBY CURRENT             |                  | 10 µA MAX                                                                                              |                                                                                                        |                                                                                                         |

\*\* INCLUSIVE OF 25°C TOLERANCE, OPERATING TEMPERATURE RANGE, VOLTAGE OR LOAD CHANGES, AGING, SHOCK AND VIBRATION. CONSULT FACTORY FOR TIGHTER STABILITY OPTIONS.

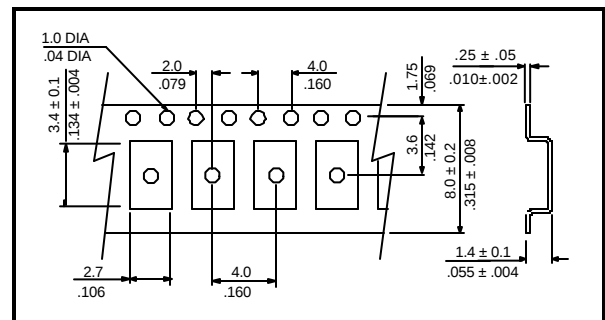
#### OUTLINE DRAWING



#### REFLOW SOLDERING PROFILE



#### CARRIER TAPE DIMENSIONS



#### PACKAGING

178 mm REEL DIAMETER, 8mm TAPE WIDTH, 4mm PITCH  
QUANTITY: 1000 PIECES PER REEL

#### PART NUMBERING SYSTEM

| SERIES | SUPPLY VOLTAGE               | FREQUENCY STABILITY                                     | FREQUENCY | EXTENDED TEMPERATURE | DUTY CYCLE   | TAPE & REEL |
|--------|------------------------------|---------------------------------------------------------|-----------|----------------------|--------------|-------------|
| COM1   | 18 1.8V<br>25 2.5V<br>3 3.3V | 10 $\pm 100$ PPM<br>05 $\pm 50$ PPM<br>025 $\pm 25$ PPM | IN MHZ    | EXT                  | T 45% TO 55% | TR          |

EXAMPLES: COM1305-25.000-EXT-T-TR