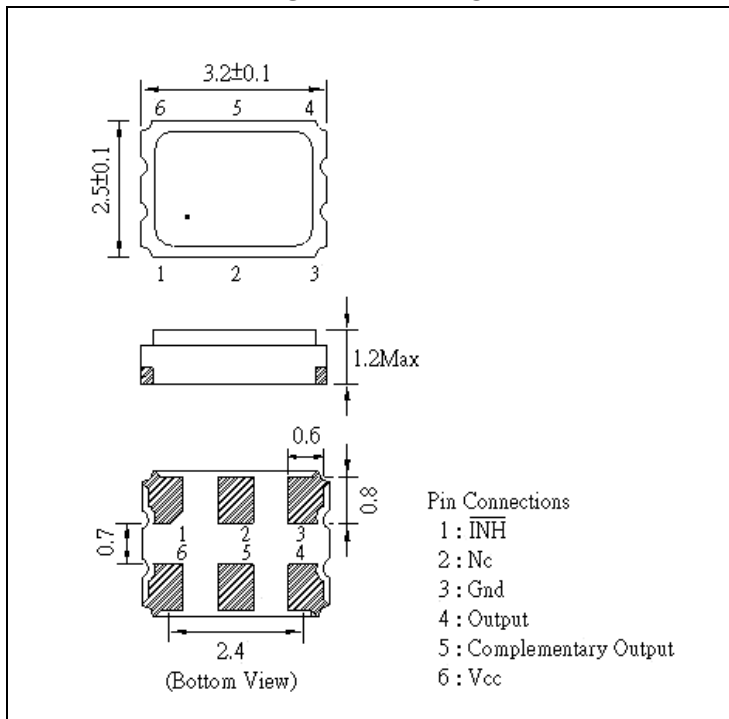


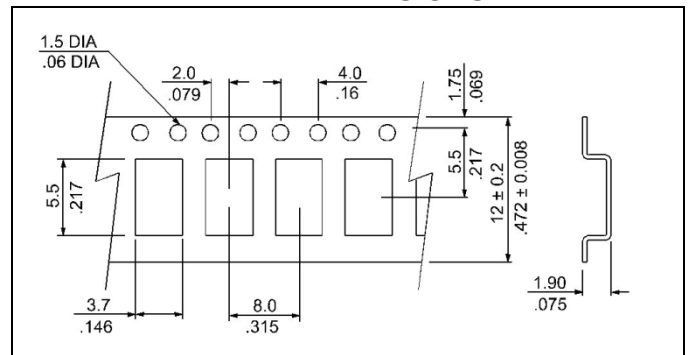
#### ELECTRICAL SPECIFICATION

| PARAMETER                     | SYMBOL         | CONDITIONS   | VALUE                                 | UNIT               |
|-------------------------------|----------------|--|---------------------------------------|--------------------|
| Nominal Frequency             | $f_o$          | $T_a=25^{\circ}\text{C}$   | 250.000                               | MHz                |
| Supply Voltage                | $V_{CC}$       | $V_{CC} \pm 5\%$   | 2.5                                   | VDC                |
| Supply Current, max           | $I_s$          | $V_{CC}; T_a=+25^{\circ}\text{C};$   | 50                                    | mA                 |
| Operating Temperature Range   | $T_a$          | ---  | -40 to +85                            | $^{\circ}\text{C}$ |
| Storage Temperature Range     | $T_{(stg)}$    | Absolute max   | -55 to +125                           | $^{\circ}\text{C}$ |
| Output Logic Type             | ---            |  | LVPECL                                |                    |
| Overall Freq. Stability, Max. | $\Delta f/f_o$ | Inclusive of $25^{\circ}\text{C}$ Tolerance and Changes due to Operating Temperature | $\pm 25$                              | ppm                |
| Output Voltage                | $V_{OL}$       | $V_{OL, \text{max}}$   | $V_{CC} - 1.620$                      | VDC                |
|                               | $V_{OH}$       | $V_{OH, \text{min}}$   | $V_{CC} - 1.025$                      | VDC                |
| Output Load                   | ---            | Terminus to $V_{CC} - 2V$  | 50                                    | $\Omega$           |
| Enable / Disable Function     | E/D            | Pin 1: N.C. (Open) or High ( $0.7 \times V_{CC}$ )                                   | Pin 4 & 5 – Oscillation (Enabled)     |                    |
|                               |                | Pin 1: Low ( $0.3 \times V_{CC}$ )   | Pin 4 & 5 – High Impedance (Disabled) |                    |
| Symmetry (Duty Cycle)         | DC             | @50% Vdd   | 45 to 55                              | %                  |
| Rise Time and Fall Time       | $t_r / t_f$    | @20% to 80% Vdd  | 1.0                                   | ns                 |
| Jitter, RMS, max.             | J              | $1\sigma, 12\text{kHz} < F_j < 20\text{MHz}$   | 1.0                                   | ps                 |

#### MECHANICAL SPECIFICATION



#### CARRIER TAPE DIMENSIONS

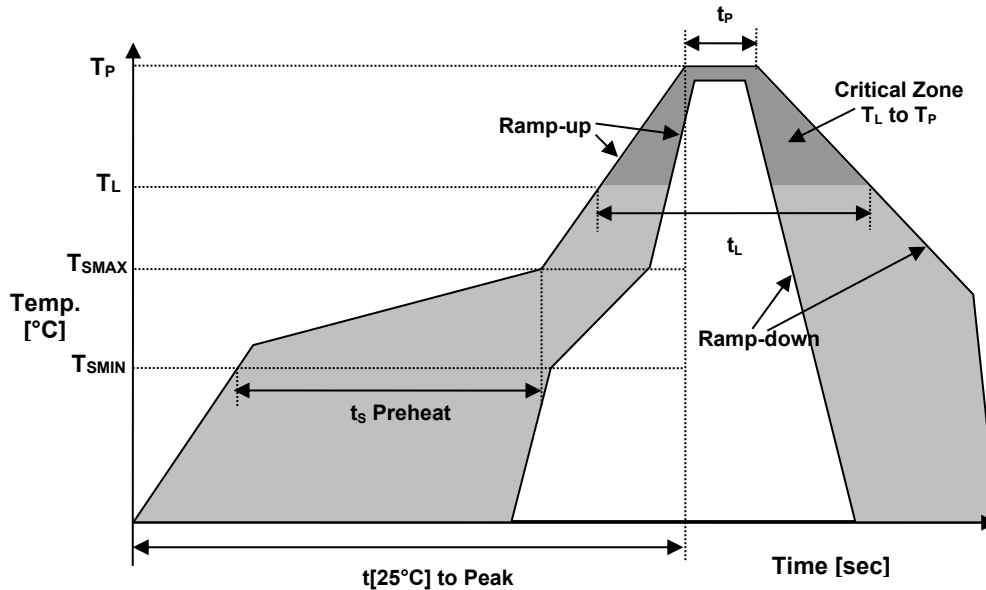


NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

#### PACKAGING

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

### REFLOW PROFILE



| Reflow profile                                 |                               |              |
|--|-------------------------------|--------------|
| Temperature Min Preheat                        | $T_{SMIN}$                    | 150°C        |
| Temperature Max Preheat                        | $T_{SMAX}$                    | 200°C        |
| Time ( $T_{SMIN}$ to $T_{SMAX}$ )              | $t_s$                         | 60-180 sec.  |
| Temperature                                    | $T_L$                         | 217°C        |
| Peak Temperature                               | $T_P$                         | 260°C        |
| Ramp-up rate                                   | $R_{UP}$                      | 3°C/sec max. |
| Ramp-down rate                                 | $R_{DOWN}$                    | 6°C/sec max. |
| Time within 5°C of Peak Temperature            | $t_p$                         | 10 sec.      |
| Time $t[25^\circ\text{C}]$ to Peak Temperature | $t[25^\circ\text{C}]$ to Peak | 480 sec.     |
| Time   | $t_L$                         | 60-150 sec.  |

### ENVIRONMENTAL

| PARAMETER                  | VALUE     |
|----------------------------|-----------|
| MOISTURE SENSITIVITY LEVEL | 1         |
| RoHS                       | COMPLIANT |
| REACH-SVHC                 | COMPLIANT |
| HALOGEN-FREE               | COMPLIANT |
| TERMINATION FINISH         | Au        |



#### MARKING

Rx250.0  
•P2AEyw

x – Internal Production ID code  
y – Year code  
w – Week code

| YEAR CODE |      |
|-----------|------|
| Year      | Code |
| 2015      | 5    |
| 2016      | 6    |
| 2017      | 7    |
| 2018      | 8    |
| 2019      | 9    |
| 2020      | 0    |
| 2021      | 1    |
| 2022      | 2    |
| 2023      | 3    |
| 2024      | 4    |
| 2025      | 5    |

| ALPHA WEEK CODE TABLE |      |      |      |      |      |
|-----------------------|------|------|------|------|------|
| Week                  | Code | Week | Code | Week | Code |
| 1                     | a    | 19   | s    | 37   | K    |
| 2                     | b    | 20   | t    | 38   | L    |
| 3                     | c    | 21   | u    | 39   | M    |
| 4                     | d    | 22   | v    | 40   | N    |
| 5                     | e    | 23   | w    | 41   | O    |
| 6                     | f    | 24   | x    | 42   | P    |
| 7                     | g    | 25   | y    | 43   | Q    |
| 8                     | h    | 26   | z    | 44   | R    |
| 9                     | i    | 27   | A    | 45   | S    |
| 10                    | j    | 28   | B    | 46   | T    |
| 11                    | k    | 29   | C    | 47   | U    |
| 12                    | l    | 30   | D    | 48   | V    |
| 13                    | m    | 31   | E    | 49   | W    |
| 14                    | n    | 32   | F    | 50   | X    |
| 15                    | o    | 33   | G    | 51   | Y    |
| 16                    | p    | 34   | H    | 52   | Z    |
| 17                    | q    | 35   | I    |      |      |
| 18                    | r    | 36   | J    |      |      |

#### APPROVAL

| RALTRON      |                      |
|--------------|----------------------|
| DRAWN BY:    | AR, January 17, 2019 |
| APPROVED BY: | CP, January 17, 2019 |
| REVISION:    | A, Initial Release   |