

LVDS CLOCK OSCILLATOR

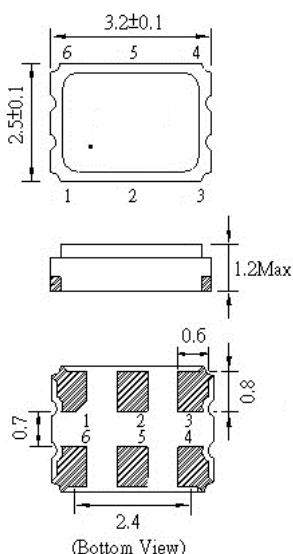
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CL3225-155.520-3.3-25-X-T-TR

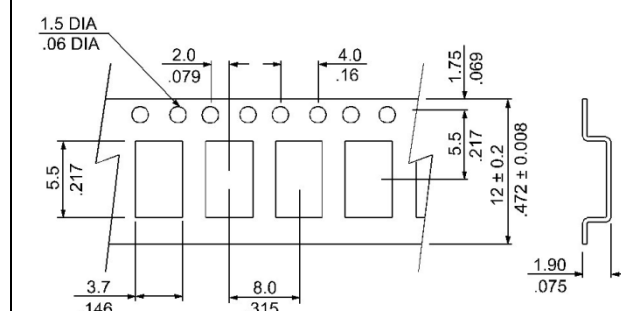
ELECTRICAL SPECIFICATION

| PARAMETER | SYMBOL | CONDITIONS | VALUE | UNIT |
|-------------------------------|----------------|--|---------------------------------------|--------------------|
| Nominal Frequency | f_o | $T_a=25^{\circ}\text{C}$ | 155.520 | MHz |
| Supply Voltage | V_{CC} | $V_{CC} \pm 5\%$ | 3.3 | VDC |
| Supply Current, max | I_s | $V_{CC}; T_a=+25^{\circ}\text{C};$ | 40 | 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 | --- | | LVDS | |
| Overall Freq. Stability, Max. | $\Delta f/f_o$ | Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load, Aging, Shock and Vibration | ± 25 | ppm |
| Output Voltage | V_{OL} | Logic "0" Level | 0.9 Min | VDC |
| | V_{OH} | Logic "1" Level | 1.6 Max | VDC |
| Output Load | --- | Connected between Out and Complementary Out | 100 | Ω |
| 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

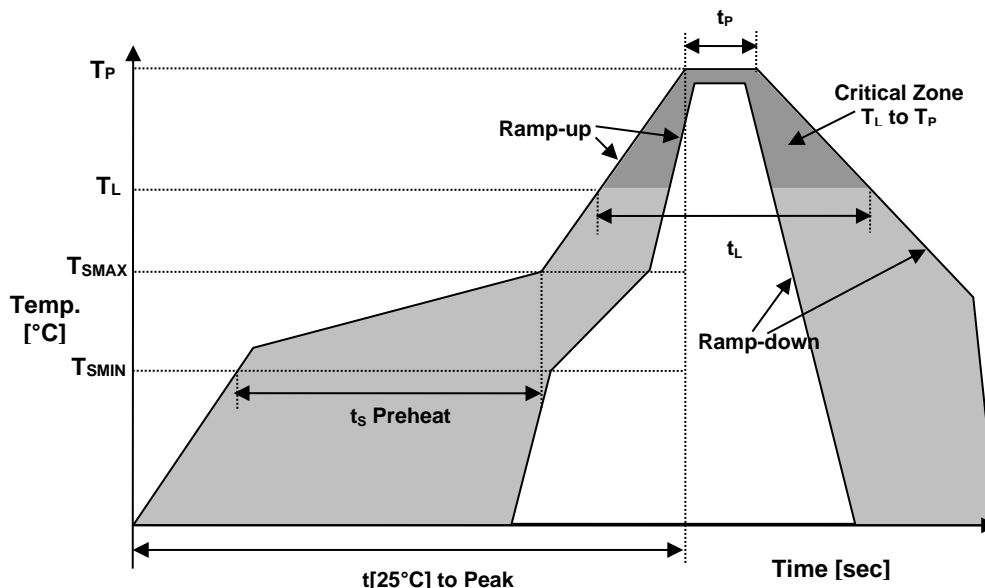


NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

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

Rx155.5
•3AEyw

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 21, 2019 |
| APPROVED BY: | CP, January 21, 2019 |
| REVISION: | A, Initial Release |

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