

RTXE-104EF133-C-26.000-TR

ELECTRICAL SPECIFICATION

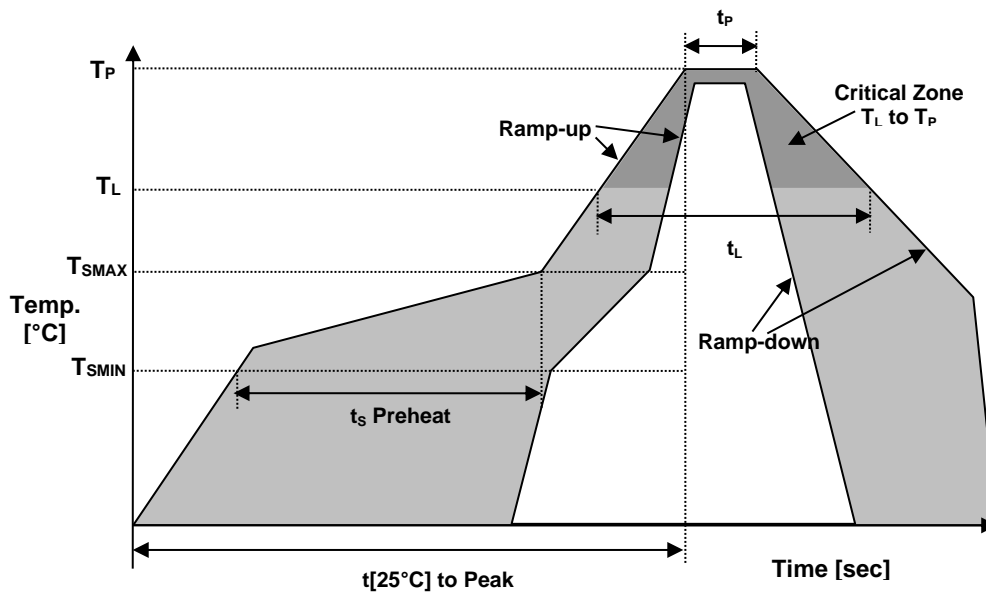
| PARAMETER | SYMBOL | CONDITIONS | VALUE | UNIT |
|---|---|--|------------------------------|--------------------------|
| Nominal Frequency | f_o | Ta=25°C | 26.000 | MHz |
| Supply Voltage | V_{CC} | | 3.3 | VDC |
| Supply Current, max | I_s | Ta=25°C | 5.5 | mA |
| Operating Temperature Range | Ta | --- | -30 ~ +75 | °C |
| Storage Temperature Range | T(stg) | Absolute max | -40 ~ +90 | °C |
| Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging Max | $\Delta f/f_o(Ta)$ $\Delta f/f_v$ $\Delta f/f_L$ $\Delta f/f_o(\text{year})$ | Reference to +25°C, over Temperature Range Vcc ± 5% V (Inside 2.375 ~ 3.63 V) Load ±10% Per Year at +25°C ± 2°C | ±2.5 ±0.3 ±0.2 ±1.0 | ppm ppm ppm ppm |
| Initial Frequency Calibration, max | f_c | Measured at 25°C, before shipment | ±1.0 | ppm |
| Reflow Shift, max | | 2 consecutive reflows, after 2 hours relaxation | ±1.0 | ppm |
| Output Level, HCMOS | -- | "0" Level, max | 0.1V _{CC} | V |
| | -- | "1" Level, min | 0.9V _{CC} | V |
| Symmetry | -- | at ½ V _{CC} level | 45 / 55 | % |
| Enable Disable Function | V_{IH} | min | 2.1 | V |
| | V_{IL} | max | 0.9 | V |
| Load | L | | 15 | pF |
| Rise and Fall Time, max | t_r/t_f | 10%V _{CC} to 90% V _{CC} | 5 | ns |
| Start-up time, max | t_s | V _{OUT} ≥ 90% V _{P-P} | 10 | ms |
| Phase noise @ freq. offset, typical. | $\mathcal{L}(\Delta f)$ | $\Delta f=1\text{kHz}$ | -135 | dBc/Hz |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=10\text{kHz}$ | -145 | dBc/Hz |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=100\text{kHz}$ | -150 | dBc/Hz |

MECHANICAL SPECIFICATION

PIN FUNCTIONS:
 [1] E/D
 [2] GND
 [3] OUTPUT
 [4] VCC

A bypass 0.01µF bypass capacitor is recommended

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 max. |
| 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. max. |
| Time t[25°C] to Peak Temperature | t[25°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

Rx26.00
 • EF3yw

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

| YEAR CODE | |
|-----------|------|
| Year | Code |
| 2019 | 9 |
| 2020 | 0 |
| 2021 | 1 |
| 2022 | 2 |
| 2023 | 3 |
| 2024 | 4 |
| 2025 | 5 |
| 2026 | 6 |
| 2027 | 7 |
| 2028 | 8 |
| 2029 | 9 |

| 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: | YL, May 26, 2021 |
| APPROVED BY: | CP, May 26, 2021 |
| REVISION: | A, Initial Release |

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