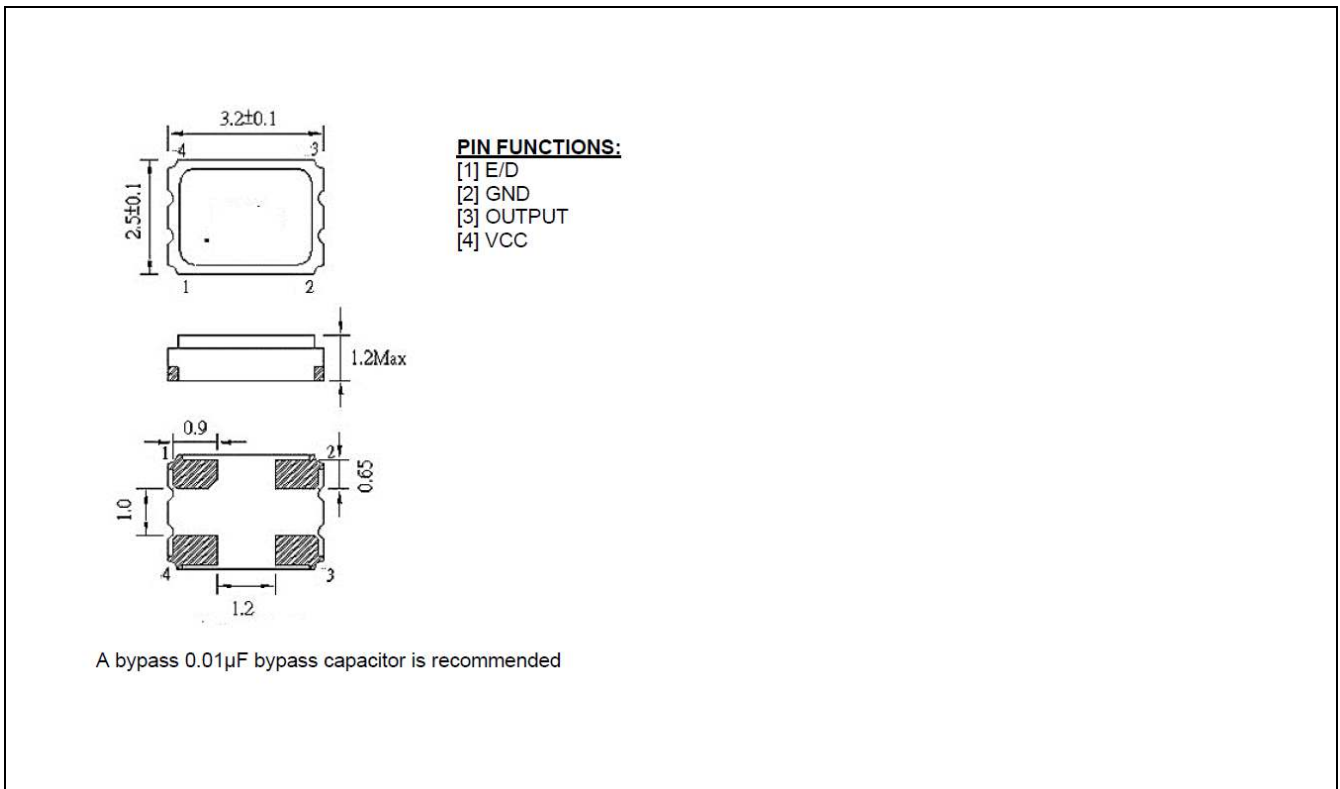


## RTXE-104EF133-C-26.000-TR

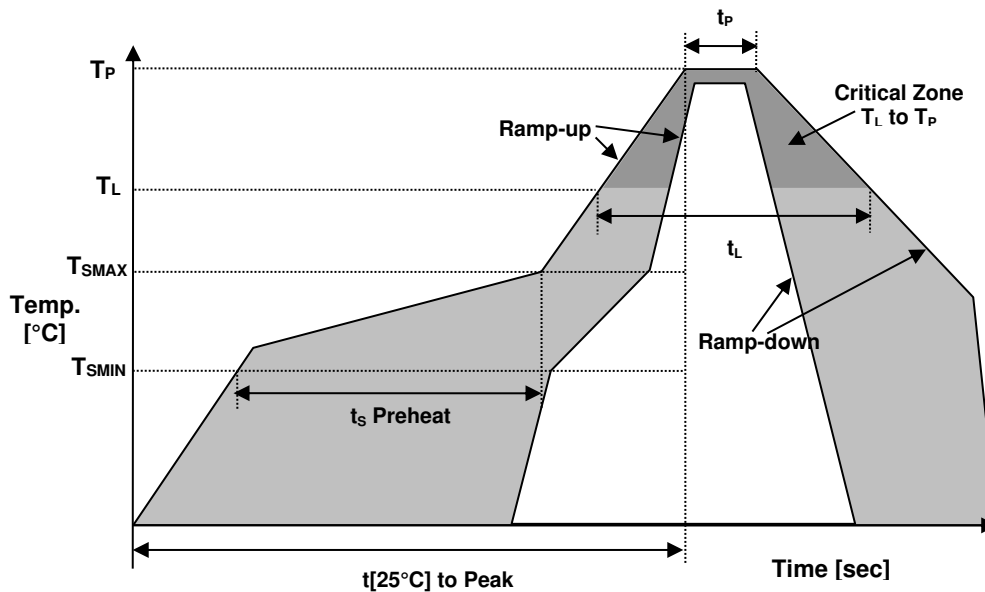
### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_0$	$T_a=25^\circ\text{C}$	26.000	MHz
Supply Voltage	$V_{CC}$		3.3	VDC
Supply Current, max	$I_S$	$T_a=25^\circ\text{C}$	5.5	mA
Operating Temperature Range	$T_a$	---	-30 ~ +75	$^\circ\text{C}$
Storage Temperature Range	$T(\text{stg})$	Absolute max	-40 ~ +90	$^\circ\text{C}$
Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging Max	$\Delta f/f_0(T_a)$ $\Delta f/f_V$ $\Delta f/f_L$ $\Delta f/f_0(\text{year})$	Reference to +25 $^\circ\text{C}$ , over Temperature Range $V_{CC} \pm 5\% V$ (Inside 2.375 ~ 3.63 V) Load $\pm 10\%$ Per Year at +25 $^\circ\text{C} \pm 2^\circ\text{C}$	$\pm 2.5$ $\pm 0.3$ $\pm 0.2$ $\pm 1.0$	ppm ppm ppm ppm
Initial Frequency Calibration, max	$f_C$	Measured at 25 $^\circ\text{C}$ , before shipment	$\pm 1.0$	ppm
Reflow Shift, max		2 consecutive reflows, after 2 hours relaxation	$\pm 1.0$	ppm
Output Level, HCMOS	--	"0" Level, max	$0.1V_{CC}$	V
	--	"1" Level, min	$0.9V_{CC}$	V
Symmetry	--	at $\frac{1}{2} V_{CC}$ 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	$t_s$	$V_{OUT} \geq 90\% V_{P-P}$	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



### 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 $t_{[25^\circ\text{C}]}$ 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

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

Raltron Electronics / RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided only for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.

Copyright © 2016, Raltron Electronics / RAMI Technology USA, LLC. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Raltron Electronics / RAMI Technology USA, LLC.