

FEATURES

- TEMPERATURE STABILITY $\pm 0.5\text{ppm} \sim \pm 2.5\text{ppm}$
- OPERATING TEMPERATURE RANGE $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- VOLTAGE CONTROL AVAILABLE (RTV-1612 SERIES)



SPECIFICATIONS

PARAMETER		VALUE
FREQUENCY RANGE		26 ~ 52 MHz
SUPPLY VOLTAGE		1.8 ~ 3.3 V
INPUT CURRENT		2.0 mA max
FREQUENCY STABILITY	vs. TEMPERATURE	$\pm 0.5 \sim \pm 2.5 \text{ ppm}$
	vs. LOAD ($\pm 10\%$)	$\pm 0.2 \text{ ppm max}$
	vs. SUPPLY VOLTAGE	$\pm 0.2 \text{ ppm max}$
	AGING 1 st YEAR	$\pm 1.0 \text{ ppm max}$
FREQUENCY TOLERANCE at 25°C AFTER 2 REFLOWS		$\pm 2.5 \text{ ppm max}$
OPERATING TEMPERATURE RANGE ¹		$-40 \sim +85^{\circ}\text{C}$
STORAGE TEMPERATURE RANGE		$-40 \sim +85^{\circ}\text{C}$
CLIPPED SINEWAVE OUTPUT VOLTAGE		0.8 V _{P-P} typ
OUTPUT LOAD		10 k Ω // 10 pF
START-UP TIME		5 ms max
FREQUENCY TUNING RANGE ²		$\pm 7 \sim \pm 16 \text{ ppm}$
PHASE NOISE at 1 kHz OFFSET		-130 dBc/Hz max



NOTE: 1. NOT ALL STABILITIES ARE AVAILABLE FOR ALL OPERATING TEMPERATURE RANGES.
CONTACT FACTORY FOR AVAILABILITY.
2. RTV ONLY

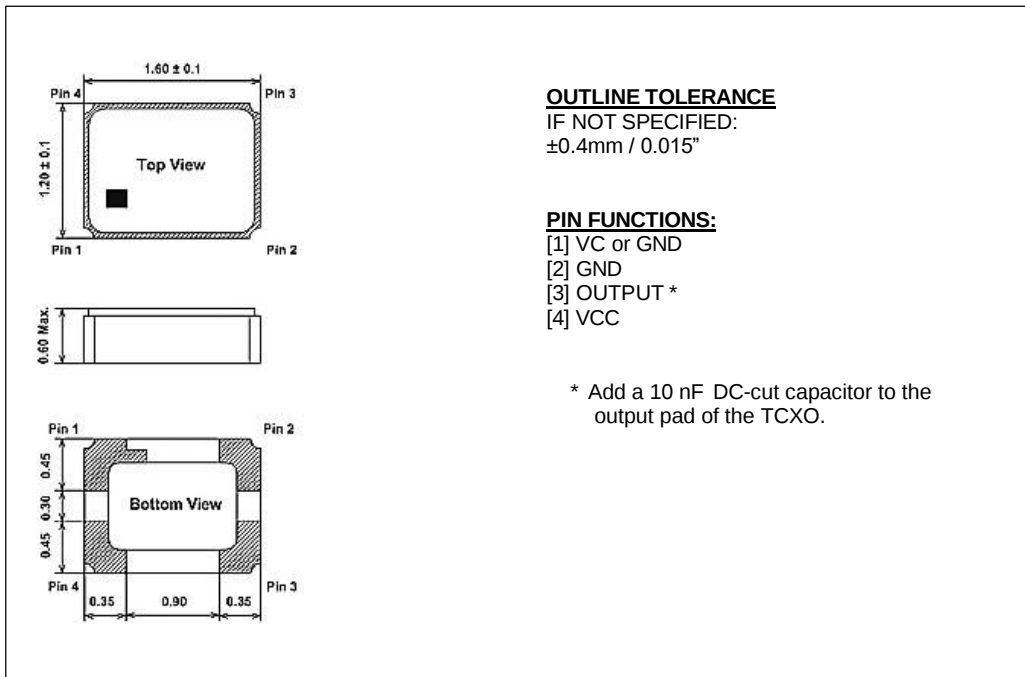
PART NUMBERING SYSTEM

TYPE	-	SERIES	STABILITY (ppm)	TEMP RANGE (°C)	VOLTAGE (V)	FREQ TUNING RANGE (ppm)	-	OUTPUT	-	FREQ (MHz)	-	TAPE & REEL
RTX (TCXO) RTV (VCTCXO)	-	1612	A: ± 0.5 B: ± 1.0 C: ± 1.5 D: ± 2.0 E: ± 2.5	LZ: $0 \sim +70$ HZ: $-20 \sim +70$ F3: $-30 \sim +85$ D3: $-40 \sim +85$	1: 1.8 33: 3.3	RTX: Blank RTV: 26: $\pm 7 \sim \pm 16$	-	S: Clipped Sine wave	-	-	-	TR

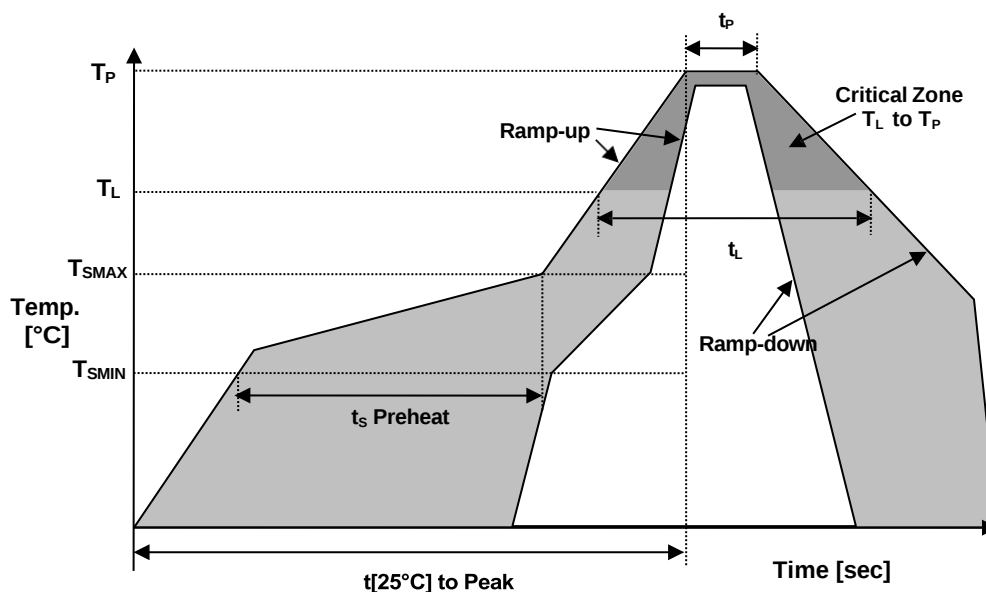
EXAMPLE: RTX-1612AF31-S-50.000-TR

Surface Mount TCXO, 1.6 mm x 1.2 mm package, $\pm 0.5 \text{ ppm}$ Stability over -30°C to $+85^{\circ}\text{C}$, 3.3V, Clipped Sinewave, 50.000 MHz, Tape and Reel Packaging

MECHANICAL SPECIFICATION



REFLOW PROFILE



SERIES RTX/RTV-1612

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



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 to 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 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.

April 2017