

#### ● 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	$\pm 0.5 \sim \pm 2.5$ ppm
	vs. LOAD ( $\pm 10\%$ )	$\pm 0.2$ ppm max
	vs. SUPPLY VOLTAGE	$\pm 0.2$ ppm max
	AGING 1 <sup>st</sup> YEAR	$\pm 1.0$ ppm max
FREQUENCY TOLERANCE at 25°C AFTER 2 REFLAWS		$\pm 2.5$ ppm max
OPERATING TEMPERATURE RANGE <sup>1</sup>		$-40 \sim +85^{\circ}\text{C}$
STORAGE TEMPERATURE RANGE		$-40 \sim +85^{\circ}\text{C}$
CLIPPED SINEWAVE OUTPUT VOLTAGE		0.8 V <sub>P-P</sub> typ
OUTPUT LOAD		10 k $\Omega$ // 10 pF
START-UP TIME		5 ms max
FREQUENCY TUNING RANGE <sup>2</sup>		$\pm 7 \sim \pm 16$ 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

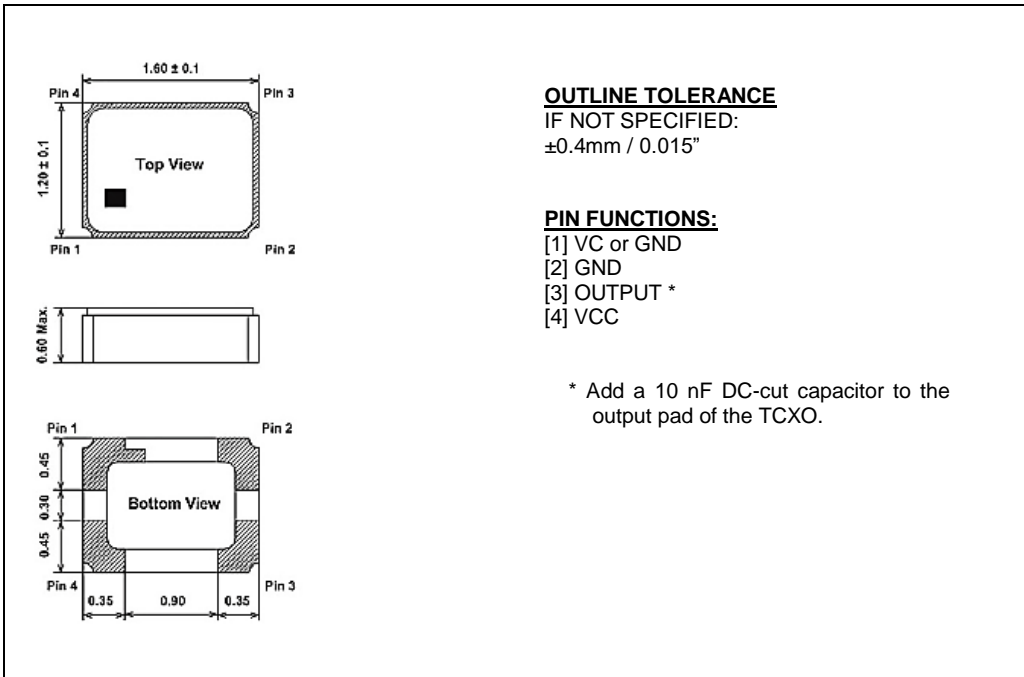
#### ■ PART NUMBERING SYSTEM

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

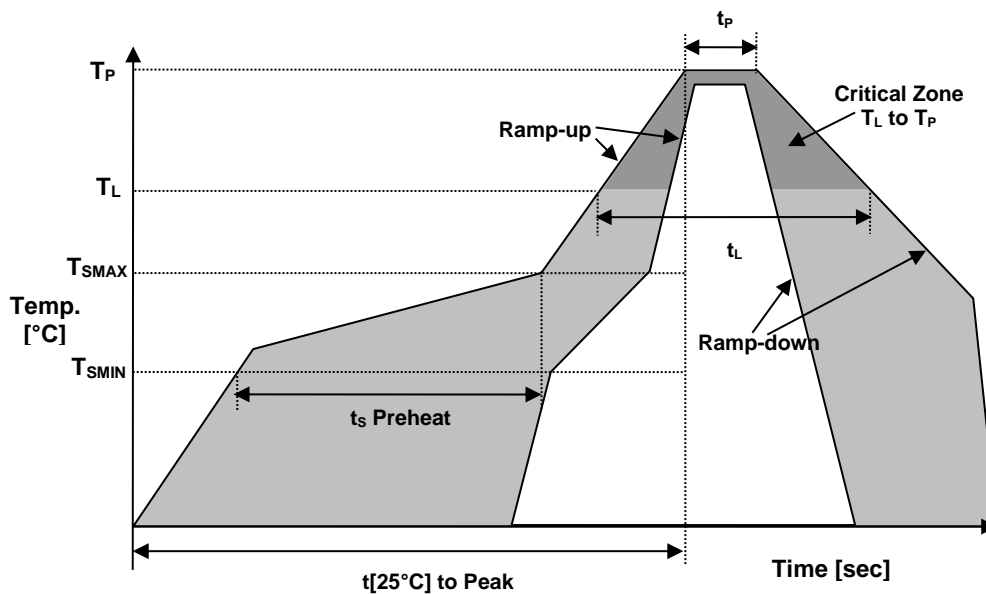
#### EXAMPLE: RTX-1612AF31-S-50.000-TR

Surface Mount TCXO, 1.6 mm x 1.2 mm package,  $\pm 0.5$  ppm Stability over  $-30^{\circ}\text{C}$  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°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



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