

● 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-2016 SERIES)



● SPECIFICATIONS

PARAMETER		VALUE
FREQUENCY RANGE		13 ~ 52 MHz
SUPPLY VOLTAGE		1.8 ~ 3.3 V
INPUT CURRENT		3.0 mA max
FREQUENCY STABILITY	vs. TEMPERATURE	$\pm 0.5 \sim \pm 2.5$ ppm
	vs. LOAD ($\pm 10\%$)	± 0.2 ppm max
	vs. SUPPLY VOLTAGE	± 0.2 ppm max
	AGING 1 st YEAR	± 1.0 ppm max
FREQUENCY TOLERANCE at 25°C AFTER 2 REFLAWS		± 2.5 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 VP-P typ
OUTPUT LOAD		10 k Ω // 10 pF
START-UP TIME		5 ms max
FREQUENCY TUNING RANGE ²		$\pm 7 \sim \pm 16$ 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

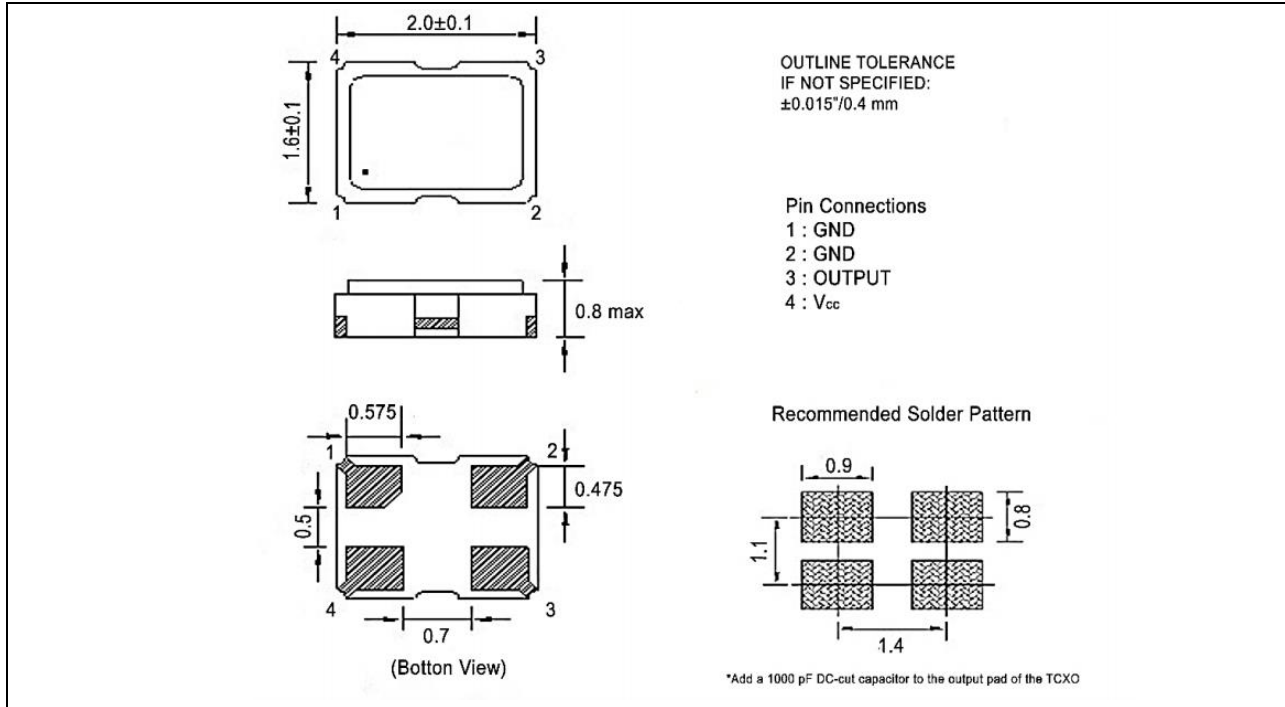
TYPE	-	SERIES	STABILITY (ppm)	TEMP RANGE (°C)	VOLTAGE (V)	FREQ TUNING RANGE (ppm)	-	OUTPUT	-	FREQ (MHz)	-	TAPE & REEL
RTX (TCXO) RTV (VCTCXO)	-	2016	A: ± 0.5 B: ± 1.0 C: ± 1.5 D: ± 2.0 E: ± 2.5	LZ: $0 \sim +70$ HZ: $-20 \sim +70$ F3: $-30 \sim +85$ D3: $-40 \sim +85$	1: 1.8 2: 2.8 33: 3.3 F: 1.8 ~ 3.3	RTX: Blank RTV: 26: $\pm 7 \sim \pm 16$	-	S: Clipped Sine wave	-		-	TR

*Other ranges available. Please contact factory.

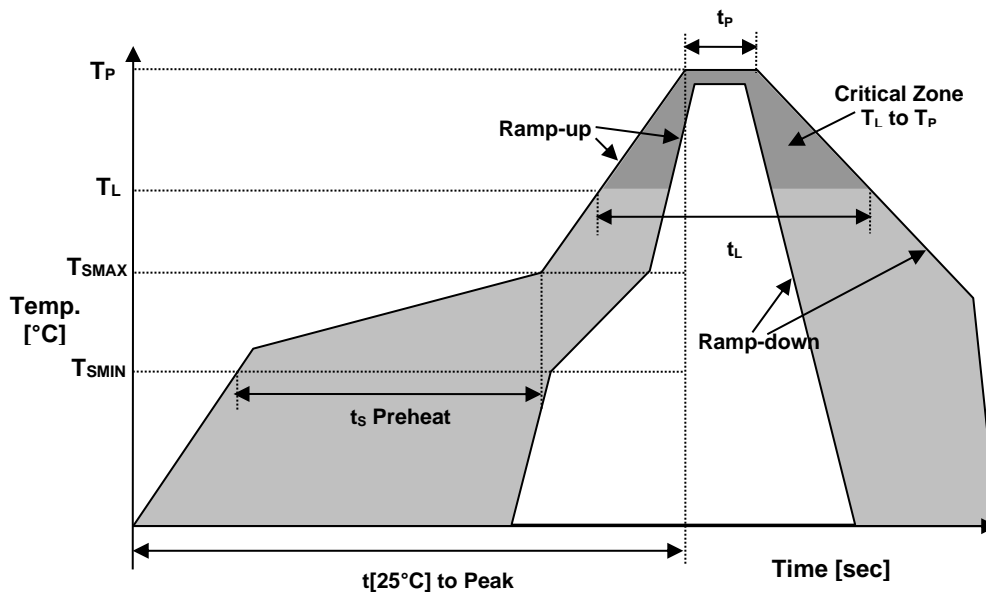
EXAMPLE: RTX-2016AF31-S-26.000-TR

Surface Mount TCXO, 2.0 mm x 1.6 mm package, ± 0.5 ppm Stability over -30°C to $+85^{\circ}\text{C}$, 3.3V, Clipped Sinewave, 26.000 MHz, Tape and Reel Packaging

MECHANICAL SPECIFICATION



REFLOW PROFILE



SERIES RTX/RTV-2016

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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