# SURFACE MOUNT TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS WITH VOLTAGE CONTROL OPTION

SERIES RTX-119 AND RTV-119

## FEATURES

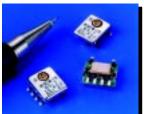
- LOW PROFILE AND SMALL FOOTPRINT
- EXCELLENT FREQUENCY STABILITY AND AGING
- 3.0 V OR 5.0 VOLT SUPPLY
- VOLTAGE CONTROL OPTION

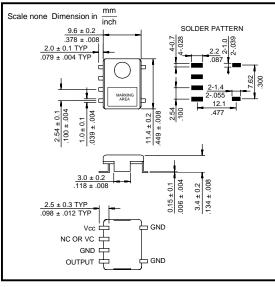
#### SPECIFICATIONS

OUTLINE DRAWING

SERIES		RTX-119	RTV-119			
FREQUENCY RANGE		9.60MHz TO 32.00 MHz	9.60 MHz TO 32.00 MHz			
FREQUENCY STABILITY TEMPERATURE RANGE	-	±2.5 PPM OVER -30°C TO +75°C	±2.5 PPM OVER -30°C TO +75°C			
FREQUENCY STABILITY SUPPLY VOLTAGE VAR	-	±0.2 PPM AT 5.0 V ± 5% ±0.2 PPM AT 3.0 V ± 5%	±0.2 PPM AT 5.0 V ± 5% ±0.2 PPM AT 3.0 V ± 5%			
FREQUENCY STABILITY OVER LOAD VARIATION		$\pm 0.3$ PPM AT 10 KOHM // 10 pF	±0.3 PPM AT 10 KOHM // 10 pF			
AGING		±1 PPM PER YEAR MAX	±1 PPM PER YEAR MAX			
OPERABLE TEMPERATURE RANGE		-40°C TO +85°C	-40°C TO +85°C			
	VOLTAGE	+5.0 VDC ± 5% VDC OR +3.0 VDC ± 5%	+5.0 VDC ± 5% VDC OR +3.0 VDC ± 5%			
INPUT	CURRENT	2.0 mA MAX (9.60 MHz TO 19.999 MHz) 3.0 mA MAX (20.00 MHz TO 32.00 MHz)	2.0 mA MAX (9.60 MHz TO 19.999 MHz) 3.0 mA MAX (20.00 MHz TO 32.00 MHz)			
	WAVEFORM†	CLIPPED SINEWAVE	CLIPPED SINEWAVE			
OUTPUT	LEVEL	1.0 V P-P FOR +5.0 VDC ± 5% 0.8 V P-P FOR +3.0 VDC ± 5%	1.0 V P-P FOR +5.0 VDC ± 5% 0.8 V P-P FOR +3.0 VDC ± 5%			
	LOAD	10 K OHM // 10 pF	10 K OHM // 10PF			
FREQUENCY ADJUSTMENT		±3 PPM MIN BY INTERNAL TRIMMER	±3 PPM MIN BY INTERNAL TRIMMER			
FREQUENCY DEVIATION†		N/A	S: ±4.5 PPM TO ±7.5 PPM AT +1.5 V ±1.0 VDC Y: ±8 PPM TO ±15 PPM AT +2.5 V ±2.0 VDC			

† OTHER STABILITIES OVER TEMPERATURE, WAVEFORMS AND FREQUENCY DEVIATIONS ARE AVAILABLE.





#### PACKAGING

180 mm REEL DIAMETER, 24 mm TAPE WIDTH, 16 mm PITCH QUANTITY: 1000 PIECES PER REEL

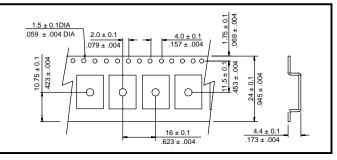
### PART NUMBERING SYSTEM

R R	REFLOW SOLDERING PROFILE							
	240 °C -	1 TO 5 °C/s						
TEMPERATURE	150 °C -	PREHEATING						

#### CARRIER TAPE DIMENSIONS

120

25 °C



TIME (SECONDS)

TYPE	REVISION		SERIES	FREQUENCY STABILITY	TEMPERATURE RANGE VOLTAGE		FREQUENCY CONTROL (RTV ONLY)		TRIMMER	WAVEFORM		FREQUENCY
RTX RTV	TBD*	-	119	E: ±2.5 PPM	F1: -30°C TO 75°C	3: +3.0 VDC ± 5% 5: +5.0 VDC ± 5%	S: ±4.5 PPM TO ±7.5 PPM (+1.5 V ±1.0 V) Y: ±8 PPM TO ±15 PPM (+2.5 V ±2.0 V)		т	S: CLIPPED SINE	Ī	IN MHz

EXAMPLE: RTV\*-119EF13S-TS-14.31818

\* REVISION IS ASSIGNED DURING MANUFACTURING

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