



## SURFACE MOUNT TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR WITH VOLTAGE CONTROL OPTION

### ● FEATURES

- ULTRA MINIATURE PACKAGE
- EXCELLENT FREQUENCY STABILITY AND AGING
- 5.0 V OR 3.0 V SUPPLY VOLTAGE

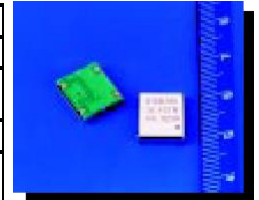
### SERIES RTX-204 AND RTV-204

### ● SPECIFICATIONS

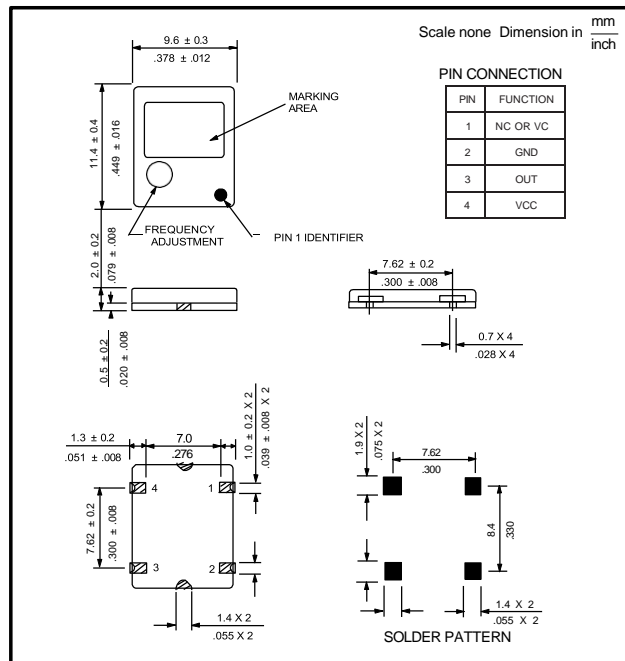
SERIES	RTX-204	RTV-204	RTV-204
FREQUENCY RANGE	10.00 MHz TO 20.00MHz		
FREQUENCY STABILITY OVER TEMPERATURE RANGE†	±2.5 PPM		
OPERATING TEMPERATURE RANGE	-30°C TO +75°C		
FREQUENCY STABILITY VS. SUPPLY VOLTAGE VARIATION	±0.3 PPM AT 3.0V ±5%		
AGING	±0.8 PPM MAX PER YEAR		
SUPPLY VOLTAGE†	+3.0 VDC ±5%		
OUTPUT LEVEL	0.8V p-p MIN AT 3.0 VDC ±5%		
LOAD	10 K OHM // 10pF		
OUTPUT WAVEFORM†	CLIPPED SINE (CMOS/TTL AVAILABLE††)		
CURRENT	2.0 mA MAX		
FREQUENCY ADJUSTMENT	±3 PPM MIN		TRIMMERLESS
VOLTAGE CONTROL RANGE†	N/A	W: ±5 PPM TO ±10 PPM (+1.5V ±1V)	N: ±8 PPM TO ±14 PPM (+1.5V ±1V)

† OTHER STABILITIES OVER TEMPERATURE, +5.0 V SUPPLY, WAVEFORMS AND FREQUENCY DEVIATIONS ARE AVAILABLE. CONSULT RALTRON FOR OTHER SPECIFICATIONS.

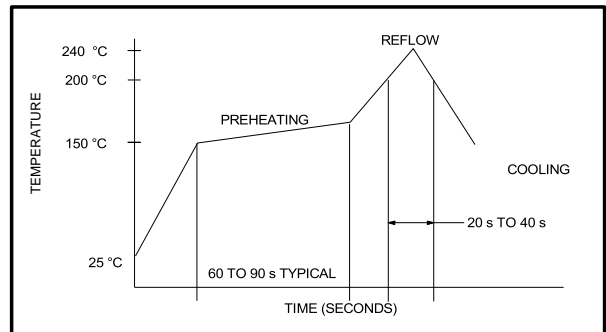
†† CMOS/TTL OUTPUT IS AVAILABLE WITH 2.5 mm MAX HEIGHT ONLY.



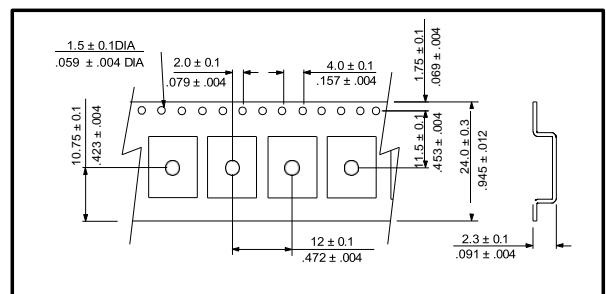
### ● OUTLINE DRAWING



### ● REFLOW SOLDERING PROFILE



### ● CARRIER TAPE DIMENSIONS



### ● PACKAGING

330 mm REEL DIAMETER, 24 mm TAPE WIDTH,  
12 mm PITCH, QUANTITY: 2000 PIECES PER REEL

### ● PART NUMBERING SYSTEM

TYPE	REVISION	SERIES	FREQUENCY STABILITY	TEMPERATURE RANGE	VOLTAGE	FREQUENCY CONTROL (RTV ONLY)	TRIMMER	WAVEFORM	FREQUENCY
RTX RTV	TBD*	204	E: ±2.5 PPM	F1: -30°C TO +75°C	3: +3.0 VDC ± 5%	W: ±5.0 PPM TO ±10.0 PPM (+1.5 V ±1.0 V) N: ±8 PPM TO ±14 PPM (+1.5 V ±1.0 V)	T	S: CLIPPED SINE	IN MHz

EXAMPLE: RTV\*-204EF13X-TS-20.000

\* REVISION IS ASSIGNED DURING MANUFACTURING

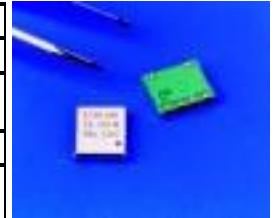
### SERIES RTX-206 AND RTV-206

#### ● FEATURES

- ULTRA MINIATURE PACKAGE
- EXCELLENT FREQUENCY STABILITY AND AGING
- 5.0 V OR 3.0 V SUPPLY VOLTAGE

#### ● SPECIFICATIONS

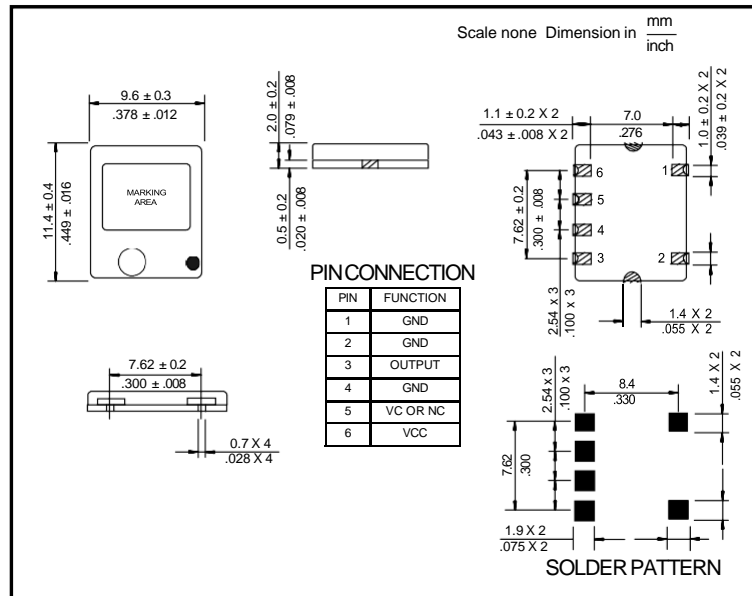
SERIES	RTX-206	RTV-206	RTV-206
FREQUENCY RANGE	10.00 MHz TO 20.00MHz		
FREQUENCY STABILITY OVER TEMPERATURE RANGE†	±2.5 PPM		
OPERATING TEMPERATURE RANGE	-30°C TO +75°C		
FREQUENCY STABILITY VS. SUPPLY VOLTAGE VARIATION	±0.3 PPM AT 3.0V ±5%		
AGING	±0.8 PPM MAX PER YEAR		
SUPPLY VOLTAGE†	+3.0 VDC ±5%		
OUTPUT LEVEL	0.8V p-p MIN AT 3.0 VDC ±5%		
LOAD	10 K OHM // 10pF		
OUTPUT WAVEFORM†	CLIPPED SINE (CMOS/TTL AVAILABLE††)		
CURRENT	2.0 mA MAX		
FREQUENCY ADJUSTMENT	±3 PPM MIN		TRIMMERLESS
VOLTAGE CONTROL RANGE†	N/A	W: ±5 PPM TO ±10 PPM (+1.5V ±1V)	N: ±8 PPM TO ±14 PPM (+1.5V ±1V)



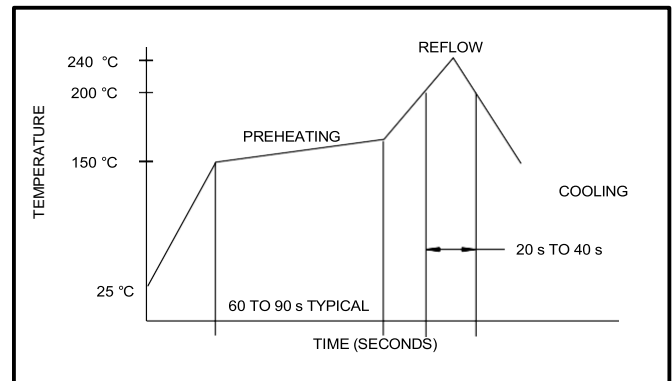
† OTHER STABILITIES OVER TEMPERATURE, +5.0 V SUPPLY, WAVEFORMS AND FREQUENCY DEVIATIONS ARE AVAILABLE. CONSULT RALTRON FOR OTHER SPECIFICATIONS.

†† CMOS/TTL OUTPUT IS AVAILABLE WITH 2.5 mm MAX HEIGHT ONLY.

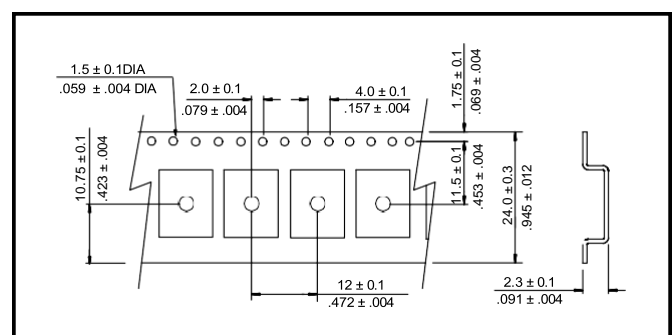
#### ● OUTLINE DRAWING



#### ● REFLOW SOLDERING PROFILE



#### ● CARRIER TAPE DIMENSIONS



#### ● PACKAGING

330 mm REEL DIAMETER, 24 mm TAPE WIDTH, 12 mm PITCH  
QUANTITY: 2000 PIECES PER REEL

#### ● PART NUMBERING SYSTEM

TYPE	REVISION	SERIES	FREQUENCY STABILITY	TEMPERATURE RANGE	VOLTAGE	FREQUENCY CONTROL (RTVXO ONLY)	TRIMMER	WAVEFORM	FREQUENCY
RTX RTV	TBD*	206	E: ±2.5 PPM	F1 -30°C TO +75°C	3: +3.0 VDC ±5%	W: ±5.0 PPM TO ±10.0 PPM (+1.5 V ±1.0 V) N: ±8 PPM TO ±14 PPM (+1.5 V ±1.0 V)	T	S: CLIPPED SINE	IN MHz

EXAMPLE: RTV\*-206EF13W-TS-16.000

\* REVISION IS ASSIGNED DURING MANUFACTURING

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