



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

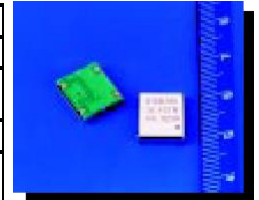
SERIES RTX-204 AND RTV-204

● SPECIFICATIONS

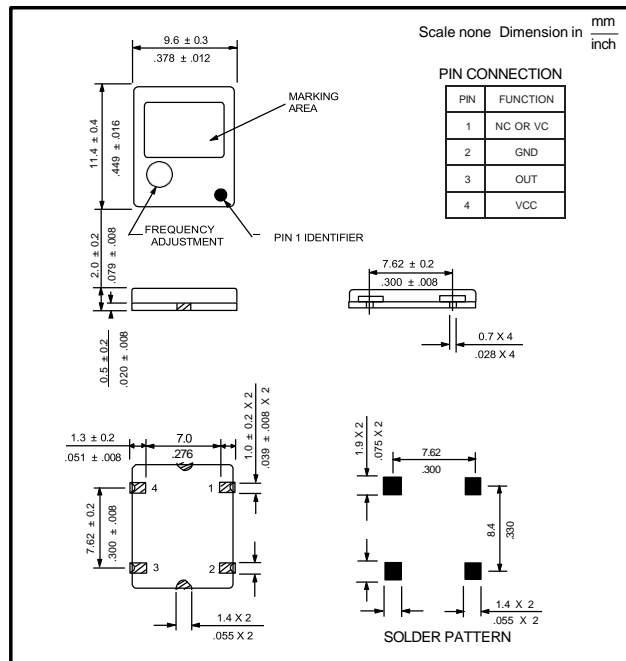
SERIES	RTX-204	RTV-204	RTV-204
FREQUENCY RANGE	10.00 MHz TO 20.00MHz		
FREQUENCY STABILITY OVER TEMPERATURE RANGE†	±2.5 PPM		
OPERATING TEMPERATURE RANGE	-30°C TO +75°C		
FREQUENCY STABILITY VS. SUPPLY VOLTAGE VARIATION	±0.3 PPM AT 3.0V ±5%		
AGING	±0.8 PPM MAX PER YEAR		
SUPPLY VOLTAGE†	+3.0 VDC ±5%		
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.

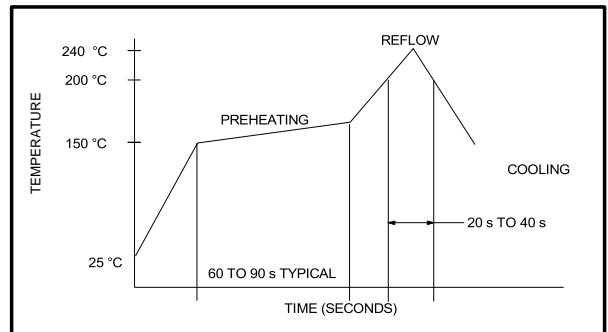
†† CMOS/TTL OUTPUT IS AVAILABLE WITH 2.5 mm MAX HEIGHT ONLY.



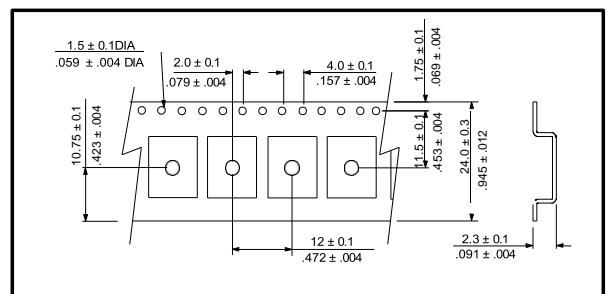
● OUTLINE DRAWING



● 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

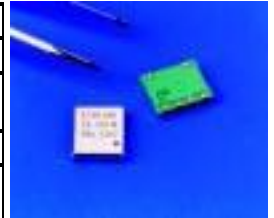
SERIES RTX-206 AND RTV-206

FEATURES

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

SPECIFICATIONS

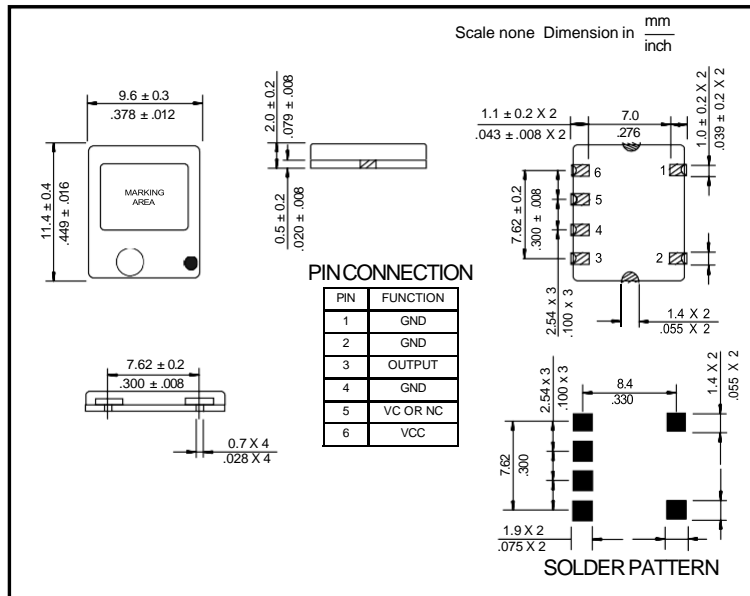
SERIES	RTX-206	RTV-206	RTV-206
FREQUENCY RANGE	10.00 MHz TO 20.00MHz		
FREQUENCY STABILITY OVER TEMPERATURE RANGE†	±2.5 PPM		
OPERATING TEMPERATURE RANGE	-30°C TO +75°C		
FREQUENCY STABILITY VS. SUPPLY VOLTAGE VARIATION	±0.3 PPM AT 3.0V ±5%		
AGING	±0.8 PPM MAX PER YEAR		
SUPPLY VOLTAGE†	+3.0 VDC ±5%		
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)



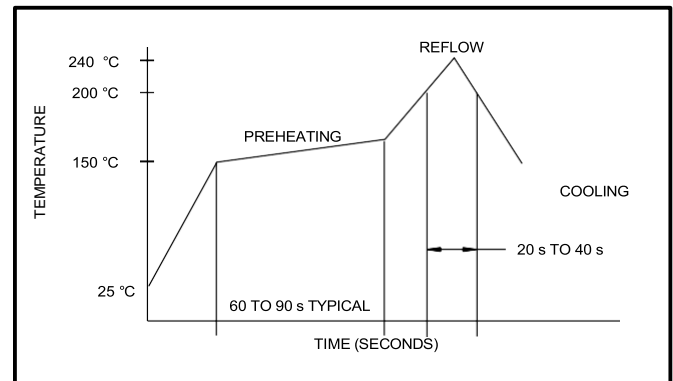
† OTHER STABILITIES OVER TEMPERATURE, +5.0 V SUPPLY, WAVEFORMS AND FREQUENCY DEVIATIONS ARE AVAILABLE. CONSULT RALTRON FOR OTHER SPECIFICATIONS.

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

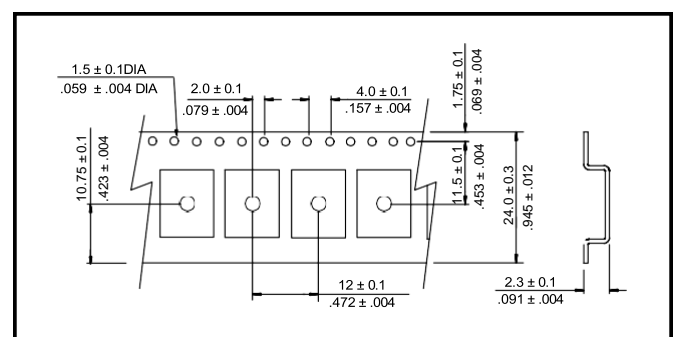
OUTLINE DRAWING



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 (RTV/XO 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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