

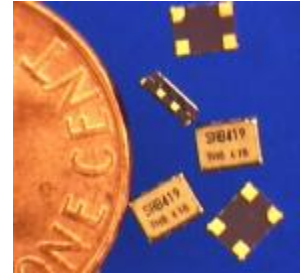
### ● FEATURES

- Ultra Miniature Package
- Excellent frequency stability over temperature
- Low Voltage

### ● APPLICATIONS

- Mobile Phones
- PDA
- Other Mobile Communications

### RTVS-104 Series

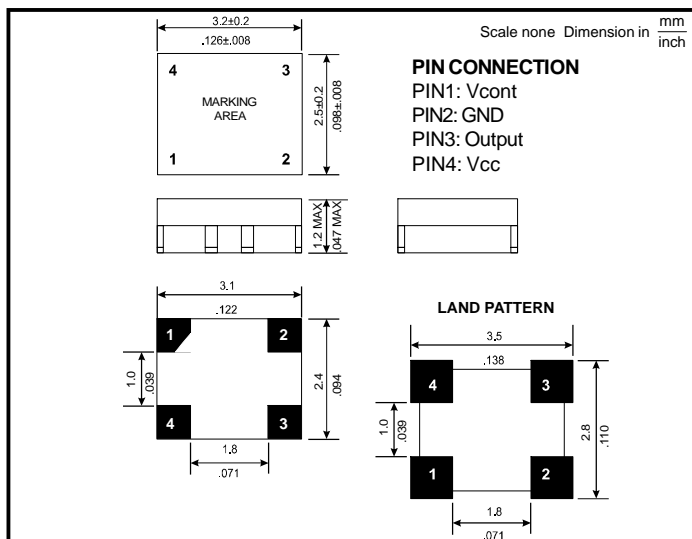


### ● SPECIFICATIONS\*

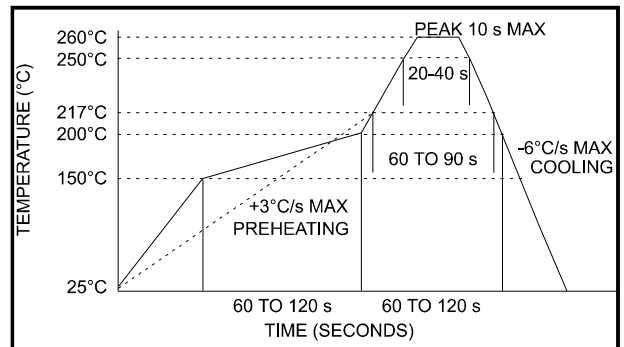
FREQUENCY	13.000 MHz	19.200 MHz	19.680 MHz	26.000 MHz
SUPPLY VOLTAGE	3.0 ± 1% VDC	2.8 ± 5% VDC	2.8 ± 5% VDC	2.4 ± 5% VDC
OUTPUT LEVEL (Clipped Sine Wave) (10 kohm//10pF±10%)	1.0 Vp-p Min	0.8 Vp-p Min	0.8 Vp-p Min	0.6 Vp-p Min
CURRENT (10 kohm//10pF±10%)	1.5 mA Max	1.5 mA Max	1.5 mA Max	1.5 mA Max
OPERATING TEMPERATURE RANGE	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +75°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
FREQUENCY STABILITY VS TEMPERATURE RANGE	±2.5 ppm Max	±2.0 ppm Max	±2.0 ppm Max	±3.0 ppm Max
FREQUENCY STABILITY VS SUPPLY VOLTAGE (DC 2.8V±5%)	±0.3 ppm Max	±0.2 ppm Max	±0.2 ppm Max	±0.3 ppm Max
FREQUENCY STABILITY VS LOAD (10 kohm//10pF±10%)	±0.3 ppm Max	±0.2 ppm Max	±0.2 ppm Max	±0.2 ppm Max
FREQUENCY STABILITY VS AGING	±1.0 ppm Max/1 year	±1.0 ppm Max/1 year	±1.0 ppm Max/1 year	±1.0 ppm Max/1 year
FREQUENCY TOLERANCE AT 25°C	±1.0 ppm Max	±1.0 ppm Max	±1.0 ppm Max	±1.5 ppm Max
FREQUENCY STABILITY AFTER REFLOW	±1.0 ppm Max	±1.0 ppm Max	±1.0 ppm Max	±1.0 ppm Max
VOLTAGE CONTROL	±5.0 ppm to ±12.0 ppm (1.5VDC ± 1VDC)	±4.5 to ±8.5 ppm (2.4VDC ± 1VDC)	±3.5 to ±7.5 PPM (1.4VDC ± 1VDC)	±10 to ±20 ppm (1.2VDC ± 1VDC)
PHASE NOISE	-135 dBc/Hz Typ.(.1kHz offset)	-110 dBc/Hz Typ.(.1kHz offset)	-110 dBc/Hz Typ.(.1kHz offset)	-125 dBc/Hz Typ.(.1kHz offset)
HARMONICS	-5 dBc Max	-7 dBc Max	-7 dBc Max	-7 dBc Max
PART NUMBER	RTVS-104EF230-S-13.000	RTVS-104DF228Q-S-19.200	RTVS-104DF228I-S-19.680	RTVS-104FF124C-S-26.000

\* OTHER SPECIFICATIONS AVAILABLE, CONTACT SALES FOR DETAILS

### ● OUTLINE DRAWING



### ● REFLOW SOLDERING PROFILE



### ● PACKAGING

330mm REEL DIAMETER, 12mm TAPE WIDTH,  
QUANTITY: 3000 PIECES PER REEL