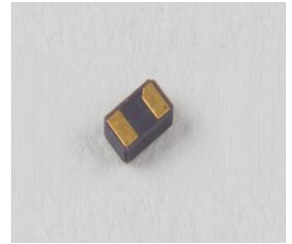


SERIES RT1610



● FEATURES

- SUITABLE FOR TIME OF DAY CLOCKS
- IDEAL FOR HIGH DENSITY PACKAGING APPLICATION
- SMALL AND COMPACT PACKAGE

● SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±10 ppm, ±20 ppm
FREQUENCY STABILITY OVER TEMPERATURE COEFFICIENT	-0.045 ppm / °C ²
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±3 ppm per year max
LOAD CAPACITANCE	9 pF, 12.5 pF*
EQUIVALENT SERIES RESISTANCE	90 kΩ max
SHUNT CAPACITANCE	2 pF max
DRIVE LEVEL	0.1 μw max
SHOCK RESISTANCE	±5 ppm max 75 cm drop test onto a hard wood surface

*Note: Other values available

● PART NUMBERING SYSTEM

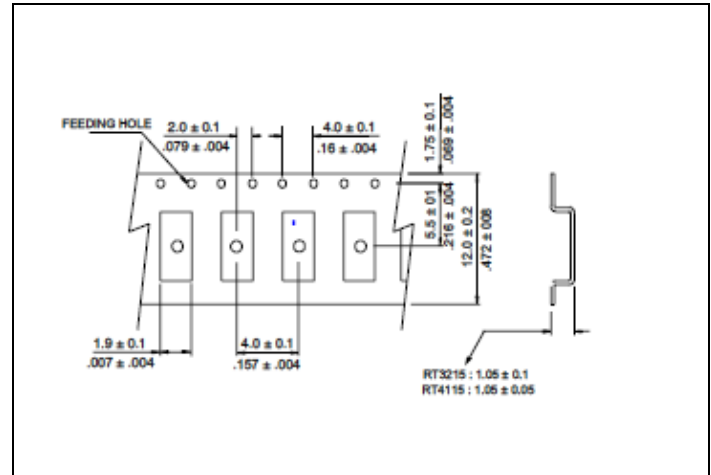
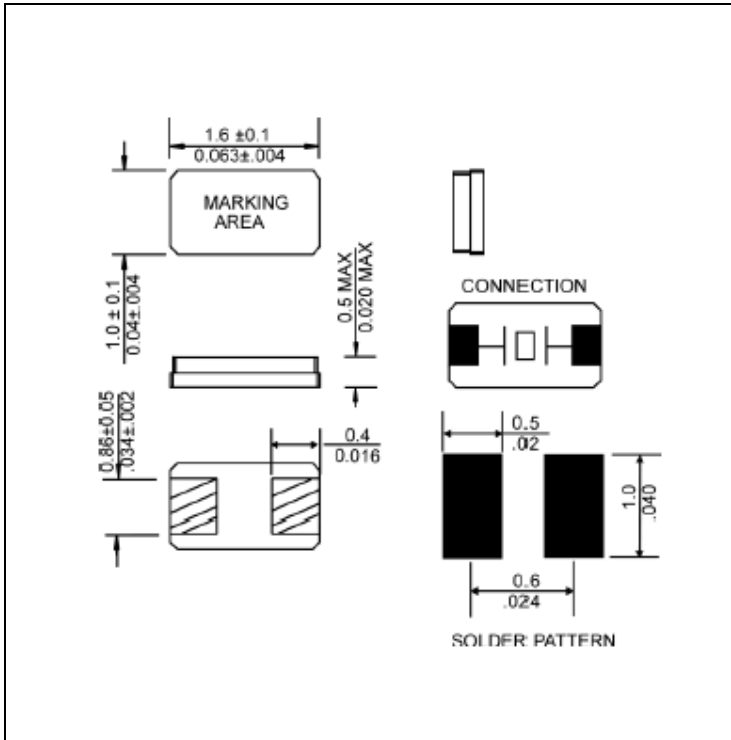
TYPE	-	FREQUENCY kHz	-	LOAD CAPACITANCE pF	-	TOLERANCE ppm	-	TAPE & REEL
RT1610	-	32.768	-	9 or 12.5	-	Blank for ±20 ppm 10 for ±10 ppm	-	TR

EXAMPLE: RT1610-32.768-12.5-TR

Surface Mount Tuning Fork Crystal, 1.6 mm x 1.0 mm Package, 32.768 kHz, 12.5 pF Load, ±20 ppm Tolerance, Operating Temperature from -40°C to +85°C, Tape and Reel Packaging

SERIES RT1610

- MECHANICAL SPECIFICATION

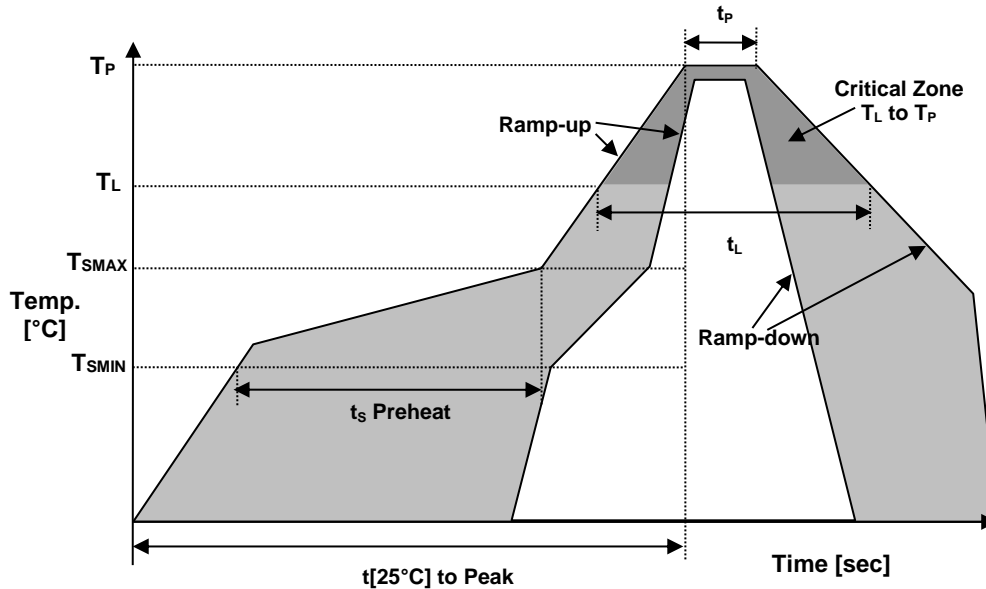


NOTE: REFER TO EIA-481 FOR DIMENSIONS

- PACKAGING

180 mm REEL DIAMETER
12 mm TAPE WIDTH, 4mm PITCH
QUANTITY: 5000 PIECES PER REEL

● REFLOW PROFILE



Reflow profile (Reference IPC/JEDEC J-STD-020)		
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 $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ 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
UNIT WEIGHT (GRAMS)	0.051

