



● **FEATURES**

- SMALL AND COMPACT PACKAGE
- SUITABLE FOR WEARABLES APPLICATIONS
- ULTRA-THIN THICKNESS 0.4mm
- RoHS COMPLIANT AND LEAD FREE

● **SPECIFICATIONS**

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±20 ppm Standard
TURNOVER TEMPERATURE	25°C ±5°C
FREQUENCY STABILITY OVER TEMPERATURE COEFFICIENT	-0.036 ppm / °C <sup>2</sup> typ
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±5 ppm first year max
LOAD CAPACITANCE	6pF, 7pF, 9pF, 12.5 pF*
EQUIVALENT SERIES RESISTANCE	90 kΩ max
SHUNT CAPACITANCE	1.65 pF typ
DRIVE LEVEL	0.3 μW max
INSULATION RESISTANCE	500 MΩ min @ DC 100V

Note:\* Other values available

● **PART NUMBERING SYSTEM**

TYPE	-	FREQUENCY kHz	-	LOAD CAPACITANCE pF	-	TOLERANCE ppm	-	OPERATING TEMPERATURE	-	TAPE & REEL
RT1008	-	32.768	-	6, 7, 9, or 12.5*	-	Blank: 20	-	Blank: -40 to +85°C	-	TR

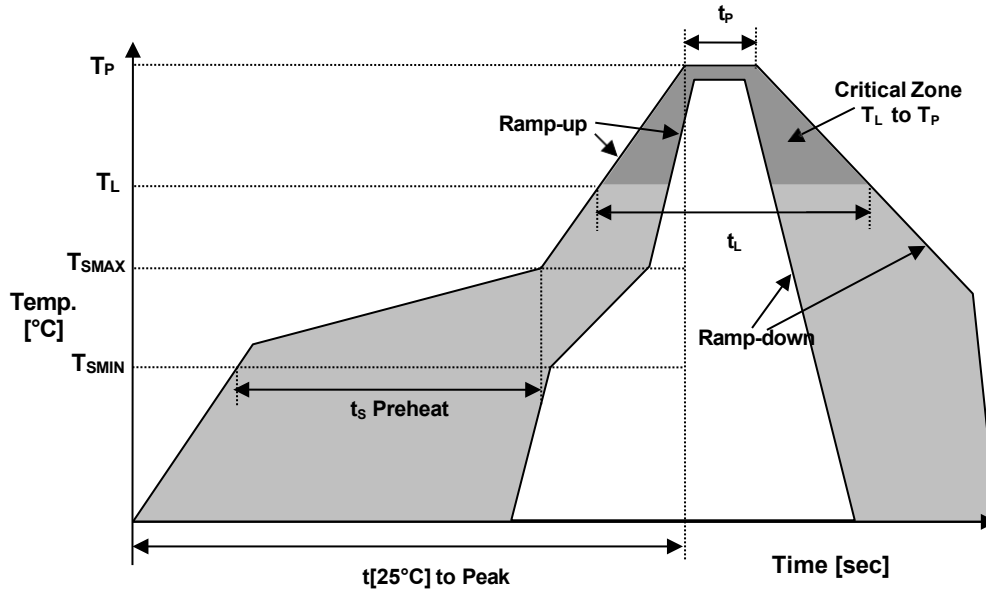
Note:\* Other values available.

**EXAMPLE: RT1008-32.768-12.5-TR**

Surface Mount Tuning Fork Crystal, 1.0 mm x 0.8 mm package, 32.768 kHz, 12.5 pF load, ±20 ppm Tolerance, Operating Temperature from -40°C to +85°C, Tape and Reel packaging



● 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
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au



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