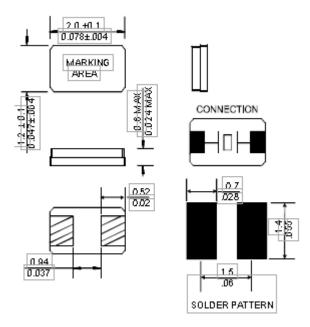


# ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 PPM MAX
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 PPM/Δ°C <sup>2</sup>
LOAD CAPACITANCE	9 pF
EQUIVALENT SERIES RESISTANCE	90K Ω MAX
DRIVE LEVEL	1.0 μW MAX
SHUNT CAPACITANCE	1.5 pF TYPICAL
AGING (FIRST YEAR)	±3 PPM PER YEAR MAX
INSULATION RESISTANCE	500M Ω MIN
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
SHOCK RESISTANCE	±5ppm max 75 cm drop test in 3 axes onto a hard surface or 3000gx0.3msx1/2 sinewave in 3 axes

# **MECHANICAL SPECIFICATION**

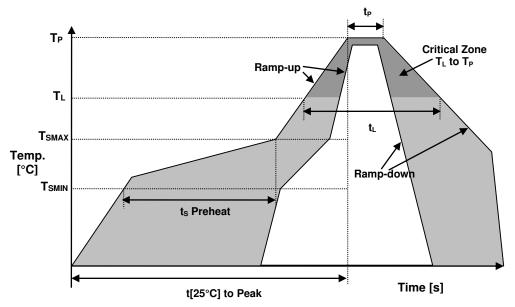




#### TUNING FORK CRYSTAL Page 2 of 3

RT2012-32.768-9-TR

## **REFLOW PROFILE**



Reflow profile		
Temperature Min Preheat	T <sub>SMIN</sub>	150°C
Temperature Max Preheat	T <sub>SMAX</sub>	200°C
Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )	ts	60-180 sec.
Temperature	TL	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/s max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/s max.
Time within 5°C of Peak Temperature	t <sub>P</sub>	10 s
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 s
Time	tL	60-150 s

## ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS-2	5/6 COMPLIANT, EXEMPTION 7a
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Sn



## • APPROVAL

DRAWN BY:	KJackson, April 14, 2016
APPROVED BY:	Jlvens, April 14, 2016
REVISION:	A, Initial Release



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