



# SPECIFICATIONS

A RAMI TECHNOLOGY Company

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.03 ±0.01 ppm / °C <sup>2</sup>
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±3 ppm first year max
LOAD CAPACITANCE	7 pF
EQUIVALENT SERIES RESISTANCE	90 kΩ max
SHUNT CAPACITANCE	1.5 pF max
DRIVE LEVEL	0.5 μW typ
INSULATION RESISTANCE	500 MΩ min @ DC 100V

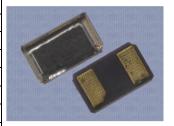
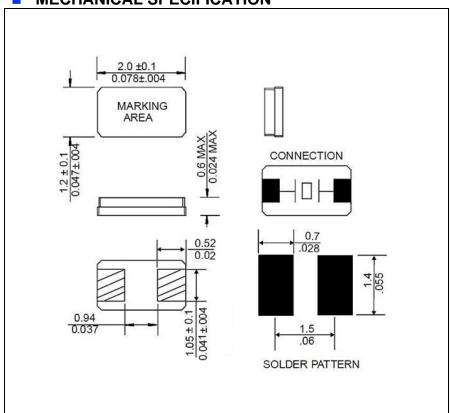


Photo is not actual part

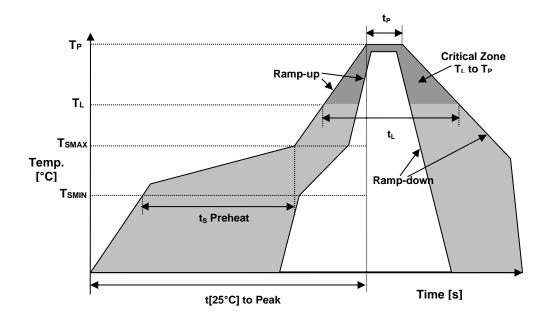
# MECHANICAL SPECIFICATION





# RT2012-32.768-7-20-EXT-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> )	t <sub>S</sub>	60-180 sec.
Temperature	$T_L$	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	$t_L$	60-150 s

## ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A





### **TUNING FORK CRYSTAL**

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## MARKING

Marking will be a single line of text from 4 to 8 digits.

Marking characters are per production line and will be specific at the shipment level

#### APPROVAL

DRAWN BY:	KJackson, September 3, 2015
APPROVED BY:	KJackson, September 3, 2015
REVISION:	A, Initial Release
	B, Updated to current spec levels by XLiu, June 22, 2020
	C. Undated to current spec levels by XI in July 5, 2021

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