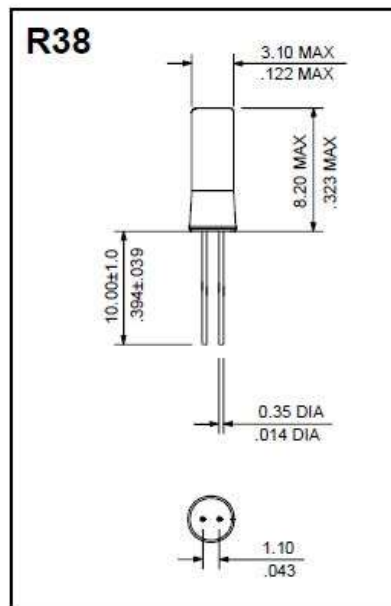


● ELECTRICAL SPECIFICATIONS

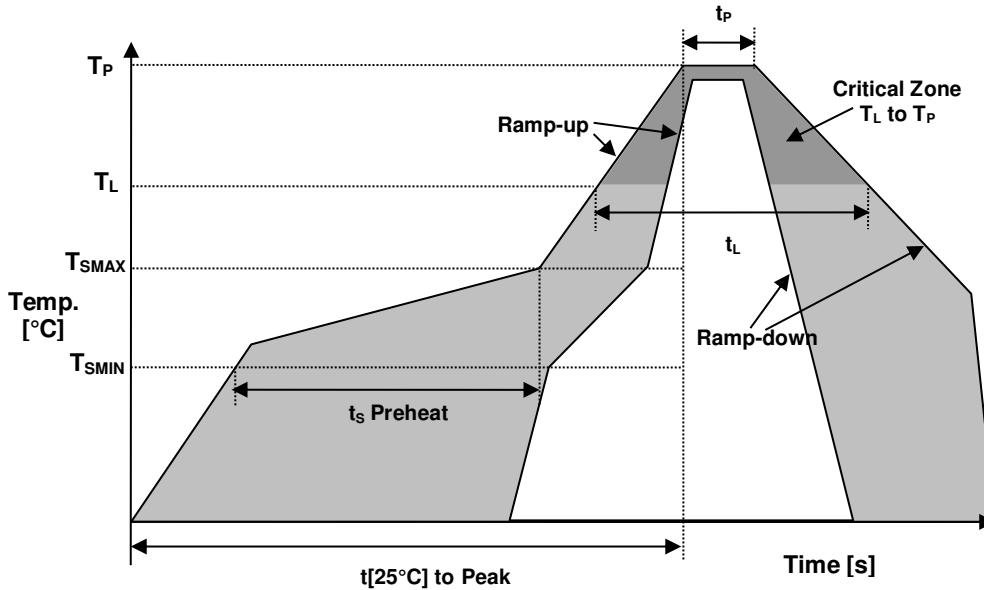
PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 ppm/Δ°C <sup>2</sup>
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	35 kΩ max
DRIVE LEVEL	1.0 μW typ
MOTIONAL CAPACITANCE	0.0035 pF typ
SHUNT CAPACITANCE	1.6 pF typ
CAPACITANCE RATIO	460 typ
AGING (FIRST YEAR)	±3 ppm max
QUALITY FACTOR	90000 typ
INSULATION RESISTANCE	500 MΩ min
OPERATING TEMPERATURE RANGE	-20°C to +70°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C

● MECHANICAL SPECIFICATION



NOTE: Through hole device, can withstand 245°C soldering by terminals only

● REFLOW PROFILE



Reflow profile		
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	$T_P$	245°C
Ramp-up rate	$R_{UP}$	3°C/s max.
Ramp-down rate	$R_{DOWN}$	6°C/s max.
Time within 5°C of Peak Temperature	$t_p$	10 s
Time $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ to Peak	480 s
Time	$t_L$	60-150 s

● ENVIRONMENTAL

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



- **APPROVAL**

DRAWN BY:	CP, June 04, 2015
APPROVED BY:	CP, June 04, 2015
REVISION:	A, Initial Release
	B, Updated to current spec levels KJ 3/29/19

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