

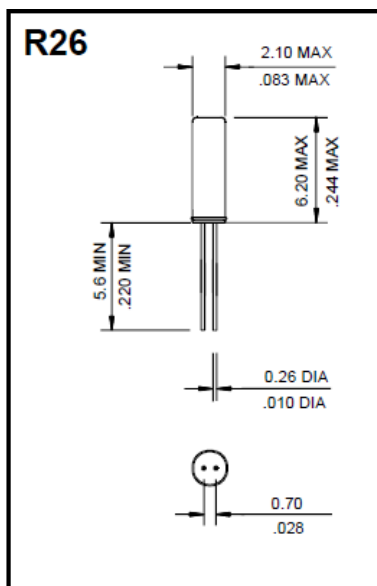
ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C, Max	±5 PPM
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 PPM/Δ°C ²
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE, Max	35k Ω
DRIVE LEVEL, Max	1.0 μW
MOTIONAL CAPACITANCE, Typical	0.003 pF
SHUNT CAPACITANCE, Typical	1.35 pF
CAPACITANCE RATIO	450
AGING (FIRST YEAR)	±3 PPM
QUALITY FACTOR, Typical	70000
INSULATION RESISTANCE, minimum	500M Ω
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C
SHOCK RESISTANCE	±5ppm max 75 cm drop test in 3 axes onto a hard surface or 3000gx0.3msx1/2 sinewave in 3 axes



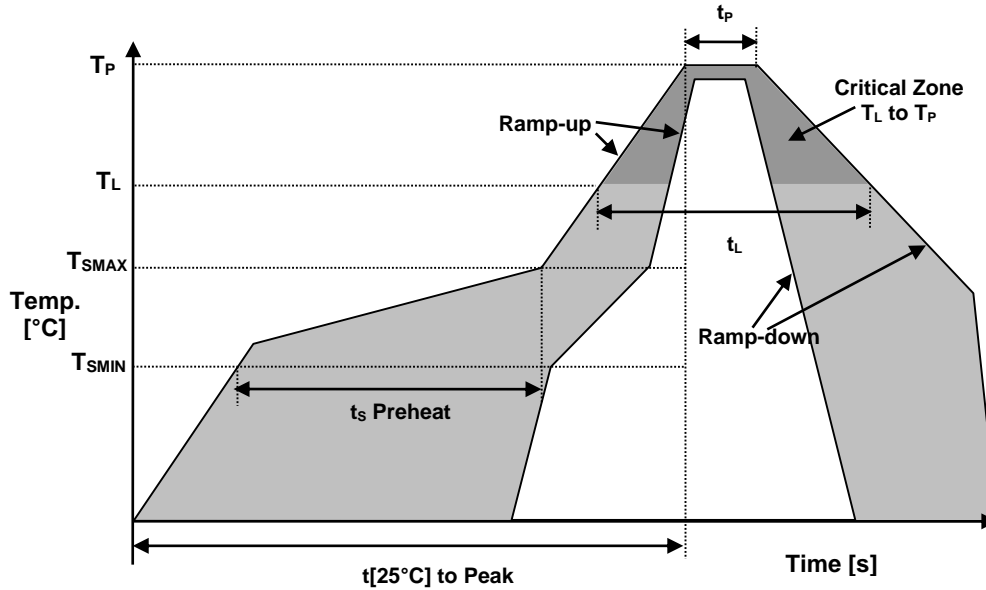
Photo is not actual part

MECHANICAL SPECIFICATIONS



NOTE: Solder by terminals only max 245°C for ten seconds

● 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	260°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-2	5/6 COMPLIANT, EXEMPTION 7a
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Sn



• MARKING

x3FmyR

x – Internal Production ID code

m – Month code

y – Year code

YEAR CODE	
Year	Code
2011	1
2012	2
2013	3
2014	4
2015	5
2016	6
2017	7
2018	8
2019	9

MONTH CODE	
MONTH	CODE
JANUARY	A
FEBRUARY	B
MARCH	C
APRIL	D
MAY	E
JUNE	F
JULY	G
AUGUST	H
SEPTEMBER	J
OCTOBER	K
NOVEMBER	L
DECEMBER	M

• APPROVAL

DRAWN BY:	KJackson, June 20, 2016
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REVISION:	A, Revised Format