

TUNING FORK CRYSTAL

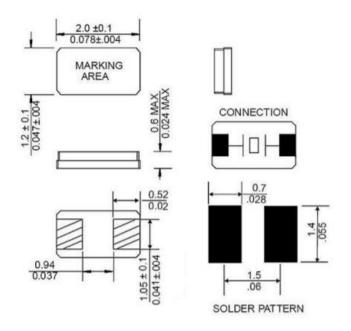
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RT2012-32.768-12.5-EXT-TR Rev C

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°C²
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	90 kΩ max
DRIVE LEVEL	0.5 µW max
SHUNT CAPACITANCE	1.5 pF max
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	±5 ppm max 75 cm drop test onto a hard wood surface

MECHANICAL SPECIFICATION



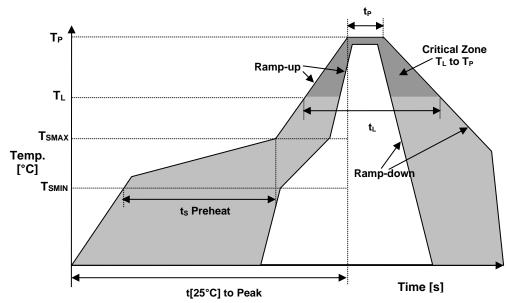


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REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T _{SMIN}	150°C
Temperature Max Preheat	T _{SMAX}	200°C
Time (T _{SMIN} to T _{SMAX})	ts	60-180 sec
Temperature	TL	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 sec
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec
Time	tL	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	Sn





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APPROVAL

DRAWN BY:	KJackson, Feb. 23, 2016
APPROVED BY:	KJackson, Feb. 23, 2016
REVISION:	A, Initial Release
	B, Updated to current spec levels
	KJ 4/18/18
	C, Updated to current spec levels
	AR, 2/17/2021

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