

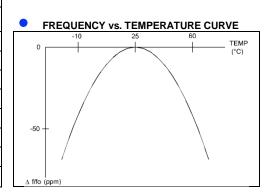
SURFACE MOUNT MICROPROCESSOR CRYSTAL

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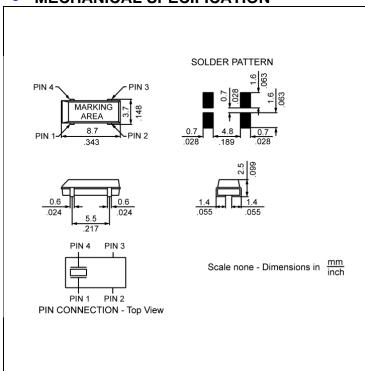
RSE-32.768-12.5-C-TR

SPECIFICATIONS

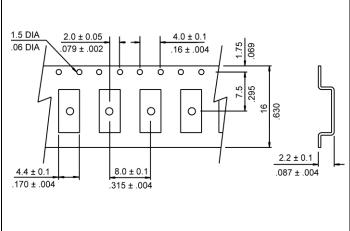
0. 200710110	
PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	+25°C ±5°C
PARABOLIC CURVATURE CONSTANT	(-0.035 ±0.008) ppm/°C ²
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING (FIRST YEAR)	±3 ppm max
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	50 kΩ max
Q FACTOR	60,000 typ
SHUNT CAPACITANCE	1.5 pF max
CAPACITANCE RATIO	450 typ
DRIVE LEVEL	1 μW max
INSULATION RESISTANCE	500 MΩ min @ DC 100 V



MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

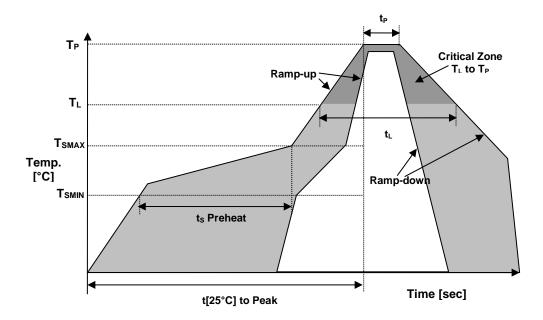
330 mm REEL DIAMETER 16 mm TAPE WIDTH, 8 mm PITCH QUANTITY: 2000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481

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REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T _{SMIN}	125°C
Temperature Max Preheat	T _{SMAX}	150°C
Time (T _{SMIN} to T _{SMAX})	t _S	60-180sec.
Temperature	TL	217°C
Peak Temperature	T _P	260°C
Ramp-up rate	R _{UP}	3°C/sec max.
Ramp-down rate	R _{DOWN}	6°C/sec 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	t _L	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





SURFACE MOUNT MICROPROCESSOR CRYSTAL

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MARKINGS

- 32.768KHZ yy ww
- 2) x3FmyR

x – Internal Production ID code

 $m-Month\ code$

y - Year code

MONTH CODE	
MONTH	CODE
JANUARY	A
FEBRUARY	В
MARCH	С
APRIL	D
MAY	E
JUNE	F
JULY	G
AUGUST	Н
SEPTEMBER	J
OCTOBER	K
NOVEMBER	L
DECEMBER	М

YEAR CODE		
Year	Code	
2019	9	
2020	0	
2021	1	
2022	2	
2023	3	
2024	4	
2025	5	
2026	6	
2027	7	
2029	8	
2029	9	

APPROVAL

DRAWN BY	F. Parra, 06 January 2014
APPROVED BY	F. Parra, 06 January 2014
REVISION	A, Initial Release
	B, Updated to current spec levels by XLiu, February 27, 2020
	C. Undated to current spec levels by XI iu. December 17, 2021

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