

SURFACE MOUNT TUNING FORK CRYSTAL

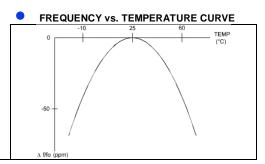
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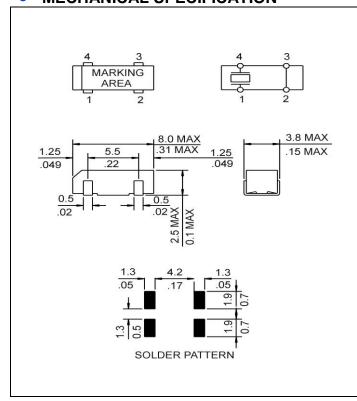
SPECIFICATIONS

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 ±0.006) 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
SHUNT CAPACITANCE	1.35 pF typ
CAPACITANCE RATIO	450 typ
DRIVE LEVEL	1 μW max
INSULATION RESISTANCE	500 MΩ min

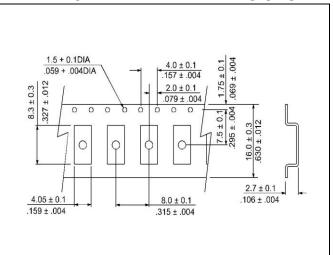




MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

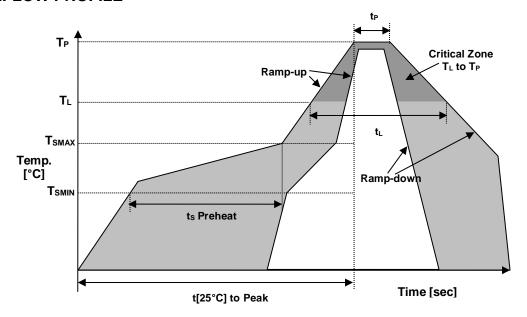
178 mm REEL DIAMETER 16 mm TAPE WIDTH, 8 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



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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})	t _S	60-180 s
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°C] to Peak Temperature	t[25°C] to Peak	480 s
Time	t∟	60-150 s

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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MARKING

x3FmyR

x – Internal Production ID code

m - Month code

y - Year code

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

YEAR CODE		
Year	Code	
2015	5	
2016	6	
2017	7	
2018	8	
2019	9	
2020	0	
2021	1	
2022	2	
2023	3	
2024	4	
2025	5	

APPROVAL

Drawn By:	KJackson, February 21, 2019
Approved By:	JIvens, February 21, 2019
Revision:	A, Initial Release
	Updated to current spec levels by
	XLiu. May 10, 2019

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