

### SURFACE MOUNT TUNING FORK CRYSTAL

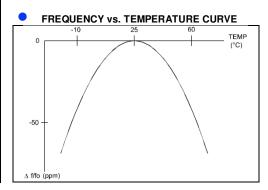
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### RSM200S-32.768-12.5-10PPM-NPB

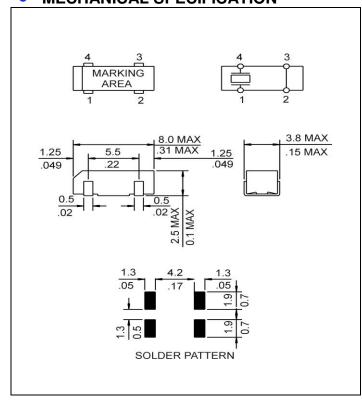
### SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±10 ppm max
TURNOVER TEMPERATURE	+25°C ±5°C
PARABOLIC CURVATURE CONSTANT	(-0.034 ±0.006) ppm/°C <sup>2</sup>
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
MOTIONAL CAPACITANCE	3 fF typ
CAPACITANCE RATIO	450 typ
DRIVE LEVEL	1 μW max
INSULATION RESISTANCE	500 MΩ min

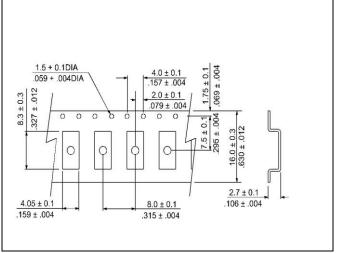




# MECHANICAL SPECIFICATION



# CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

#### PACKAGING

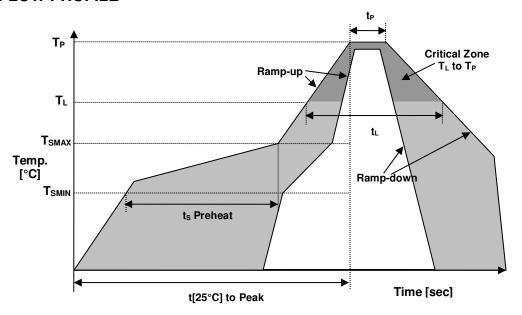
178 mm REEL DIAMETER 16 mm TAPE WIDTH, 8 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481

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# RSM200S-32.768-12.5-10PPM-NPB

# REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T <sub>SMIN</sub>	150°C
Temperature Max Preheat	T <sub>SMAX</sub>	200°C
Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )	ts	60-180 s
Temperature	T <sub>L</sub>	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/s max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/s max.
Time within 5°C of Peak Temperature	t <sub>P</sub>	10 s
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 s
Time	tL	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





### SURFACE MOUNT TUNING FORK CRYSTAL

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# RSM200S-32.768-12.5-10PPM-NPB

#### MARKING

x3FmyR

x – Internal Production ID codem – Month codey – Year code

MONTH CODE		
MONTH	CODE	
	0052	
JANUARY	Α	
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
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, October 9, 2019
Approved By:	JIvens, October 9, 2019
Revision:	A, Initial Release

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