

### SURFACE MOUNT MICROPROCESSOR CRYSTAL

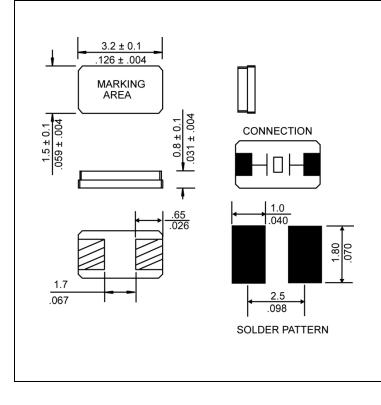
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## RT3215-32.768-12.5-TR-NS19

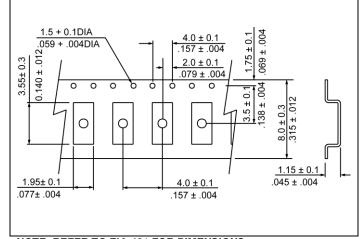
## • SPECIFICATIONS

PARAMETER	VALUE
FREQUENCY RANGE	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	+25 ±5°C
TEMPERATURE COEFFICIENT	-0.035 x 10 <sup>-6</sup> / °C <sup>2</sup> max
SHUNT CAPACITANCE	1.2 pF typ ⇔
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	70 kΩ max
DRIVE LEVEL	1 μW max ⇔
AGING	±3 ppm first year max
OPERATING TEMPERATURE RANGE	-40°C to +85°C Standard
STORAGE TEMPERATURE RANGE	-55°C to +125°C
MOTIONAL CAPACITANCE	3.7 fF typ ⇔
INSULATION RESISTANCE	500 MΩ max

# MECHANICAL SPECIFICATION



## **CARRIER TAPE DIMENSIONS**



NOTE: REFER TO EIA-481 FOR DIMENSIONS

### PACKAGING

330 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

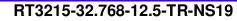
IN ACCORDANCE WITH EIA-481

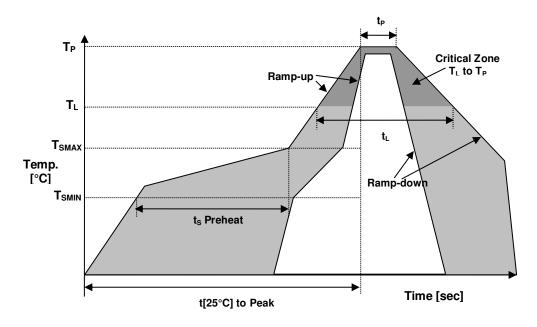


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## • REFLOW PROFILE





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 sec.
Temperature	TL	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/sec max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/sec max.
Time within 5°C of Peak Temperature	t <sub>P</sub>	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	Au





#### SURFACE MOUNT MICROPROCESSOR CRYSTAL

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## RT3215-32.768-12.5-TR-NS19

### MARKING

R3xym

- x Internal Production ID code
- y Year code
- m Month code

YEAR CODE		
Code		
5		
6		
7		
8		
9		
0		
1		
2		
3		
4		
5		

ALPHA MONTH CODE TABLE		
Month	Code	
January	А	
February	В	
March	С	
April	D	
May	Е	
June	F	
July	G	
August	Н	
September	J	
October	K	
November	L	
December	М	

### APPROVAL

Revision:	A Initial Release
Approval By:	KJackson
Date:	February 29, 2016

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