

### SURFACE MOUNT MICROPROCESSOR CRYSTAL

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#### RH100-20.000-18-2020-TR

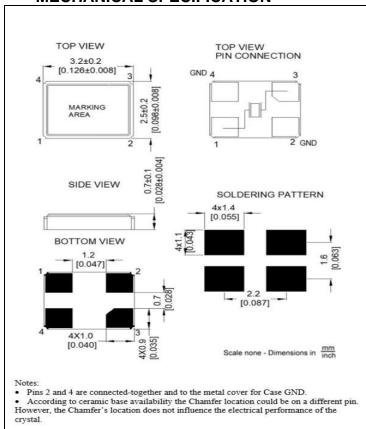
#### SPECIFICATIONS

PARAMETER	VALUE		
FREQUENCY RANGE	20.000 MHz		
MODE OF OSCILLATION	Fundamental		
FREQUENCY TOLERANCE AT 25°C	±20 ppm max		
FREQUENCY STABILITY OVER TEMPERATURE	±20 ppm max		
OPERATING TEMPERATURE RANGE	-20°C to +70°C		
STORAGE TEMPERATURE RANGE	-40°C to +85°C		
AGING	±3 ppm per year max		
LOAD CAPACITANCE	18 pF		
EQUIVALENT SERIES RESISTANCE	60 Ω		
SHUNT CAPACITANCE	7 pF max		
DRIVE LEVEL	300 μW typical, 500 μW max		

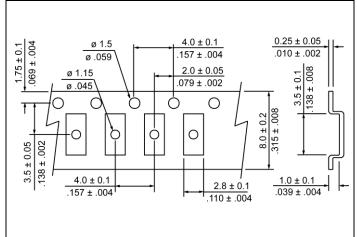


Photo is not actual part

# MECHANICAL SPECIFICATION



## CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

#### PACKAGING

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

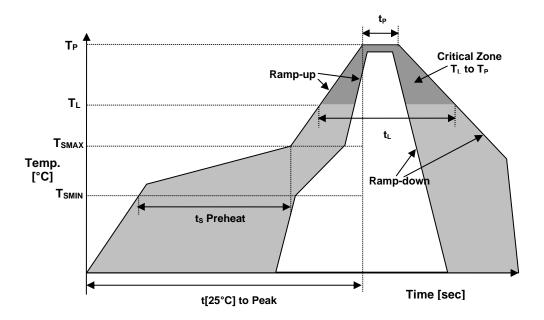
IN ACCORDANCE WITH EIA-481

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### REFLOW PROFILE



Reflow profile				
Temperature Min Preheat	T <sub>SMIN</sub>	125°C		
Temperature Max Preheat	T <sub>SMAX</sub>	150°C		
Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )	ts	30-60 sec.		
Temperature	T∟	217°C		
Peak Temperature	T <sub>P</sub>	230°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	120 sec.		
Time	t∟	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





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#### MARKING

R20.000 xxBDyw

x – Internal Production ID code

y - Year code

w – Week code

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	

	ALPHA WEEK CODE TABLE				
Week	Code	Week	Code	Week	Code
1	a	19	S	37	K
2	b	20	t	38	L
3	c	21	u	39	M
4	d	22	v	40	N
5	e	23	w	41	О
6	f	24	x	42	P
7	g	25	у	43	Q
8	h	26	Z	44	R
9	i	27	A	45	S
10	j	28	В	46	T
11	k	29	С	47	U
12	1	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	О	33	G	51	Y
16	р	34	Н	52	Z
17	q	35	I		
18	r	36	J		

## APPROVAL

DRAWN BY	KJackson, February 19, 2015
APPROVED BY	KJackson, February 19, 2015
REVISION	A, Initial Release
	B, Updated to current spec levels
	by XS, February 18, 2021

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