

### SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 1 of 3

#### RH100-12.000-18-2020-TR

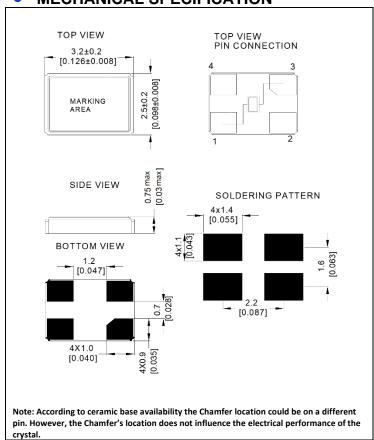
#### SPECIFICATIONS

PARAMETER	VALUE	
NOMINAL FREQUENCY	12.000 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	-55°C to +125°C	
AGING	±2 ppm first year max	
LOAD CAPACITANCE	18 pF	
EQUIVALENT SERIES RESISTANCE	100 Ω max	
SHUNT CAPACITANCE	CE 3.5 pF max	
DRIVE LEVEL	300 μW max	
INSULATION RESISTANCE	500 MΩ min @ DC 100V	

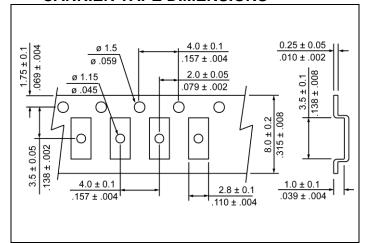


Photo is not actual part

# MECHANICAL SPECIFICATION



# CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

# PACKAGING

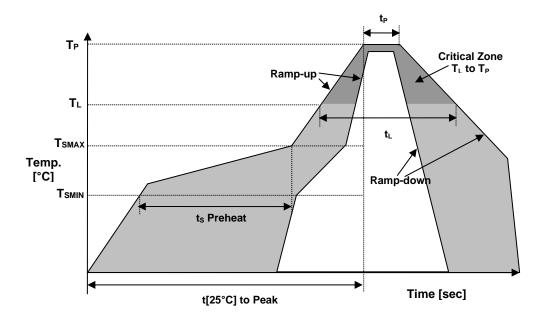
178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



## RH100-12.000-18-2020-TR

## 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> )	t <sub>S</sub>	60-180 sec.		
Temperature	TL	217°C		
Peak Temperature	$T_P$	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	t <sub>L</sub>	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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Page 3 of 3

### RH100-12.000-18-2020-TR

### MARKING

R12.000 xBDyw

x – 1 or 2 Digits as Internal Production ID code

y - Year code

w – Week code

YEAR CODE		
Year	Code	
2018	8	
2019	9	
2020	0	
2021	1	
2022	2	
2023	3	
2024	4	
2025	5	
2026	6	
2027	7	
2028	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	y	43	Q
8	h	26	Z	44	R
9	i	27	A	45	S
10	j	28	В	46	T
11	k	29	C	47	U
12	1	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	0	33	G	51	Y
16	p	34	Н	52	Z
17	q	35	I		
18	r	36	J		

### APPROVAL

DRAWN BY	CP, January 05, 2016
APPROVED BY	CP, January 05, 2016
REVISION	A, Initial Release
	B, Updated to current spec levels by
	XLiu, August 31, 2022

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