

SURFACE MOUNT MICROPROCESSOR CRYSTAL

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RH100-12.000-18-2020-EXT-TR

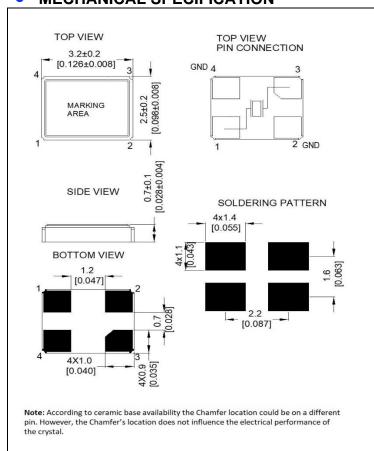
SPECIFICATIONS

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	-40°C to +85°C		
STORAGE TEMPERATURE RANGE	-40°C to +85°C		
AGING	±2 ppm first year max		
LOAD CAPACITANCE	18 pF		
EQUIVALENT SERIES RESISTANCE	100 Ω max		
SHUNT CAPACITANCE	3.5 pF max		
DRIVE LEVEL	300 μW max		
REFLOW CONDITIONS	260°C for 10 sec max		

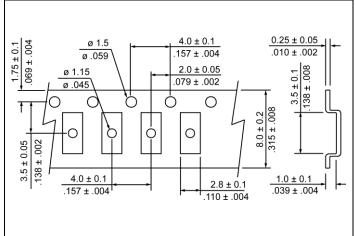


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

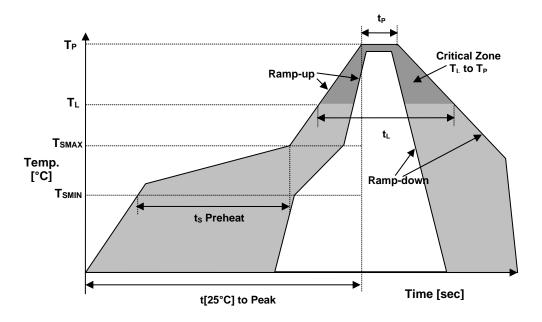
178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



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REFLOW PROFILE



Reflow profile				
Temperature Min Preheat	T _{SMIN}	150°C		
Temperature Max Preheat	T _{SMAX}	200°C		
Time (T _{SMIN} to T _{SMAX})	t _S	60-180 sec.		
Temperature	T_L	217°C		
Peak Temperature	T_P	260°C		
Ramp-up rate	R _{UP}	3°C/sec max.		
Ramp-down rate	R _{DOWN}	6°C/sec max.		
Time within 5°C of Peak Temperature	t _P	10 sec.		
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.		
Time	t_L	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

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	у	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	О	33	G	51	Y
16	р	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

DRAWN BY	KJackson, August 25, 2020
APPROVED BY	AG, August 25, 2020
REVISION	A, Initial Release
	B, Updated to current spec levels KJ
	1/14/22

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