

SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 1 of 3

RH100-12.000-18-2020-EXT-TR

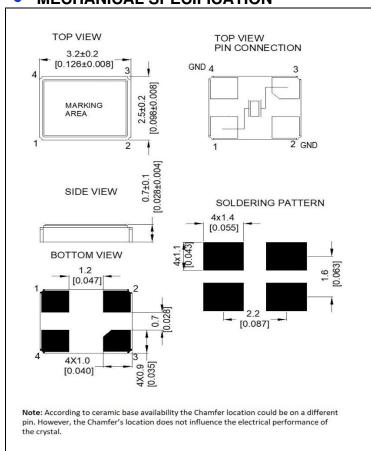
SPECIFICATIONS

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		

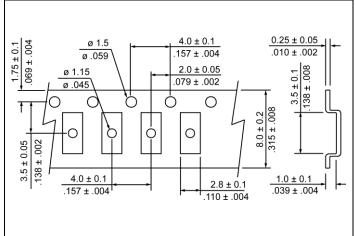


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

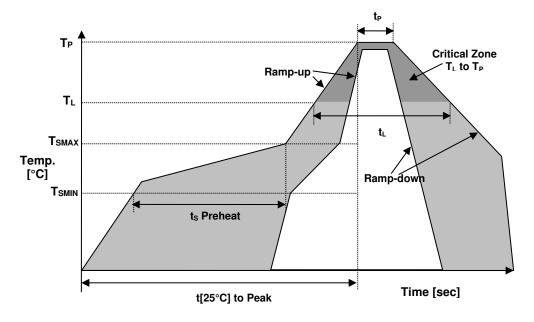
178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



RH100-12.000-18-2020-EXT-TR

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₽	10 sec.		
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 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





SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 3 of 3

RH100-12.000-18-2020-EXT-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	O
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	o	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

Raltron Electronics / RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided only for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not sasume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.

Copyright © 2016, Raltron Electronics / RAMI Technology USA, LLC. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Raltron Electronics / RAMI Technology USA,