

Page 1 of 3

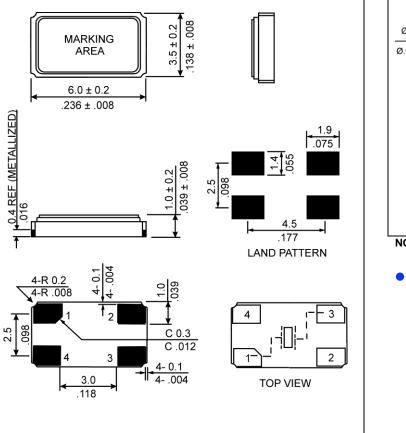
### H10S-12.000-18-5050-EXT-TR

## **SPECIFICATIONS**

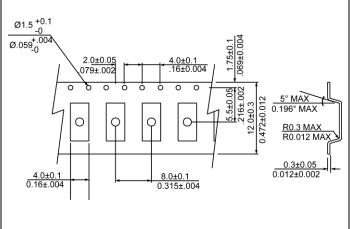
PARAMETER	VALUE
FREQUENCY RANGE	12.000 MHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±50 ppm max
FREQUENCY STABILITY OVER TEMPERATURE	±50 ppm max
OPERATING TEMPERATURE RANGE	-40°C TO +85°C
STORAGE TEMPERATURE RANGE	-40°C TO +85°C
AGING	±2 ppm first year max
LOAD CAPACITANCE	18 pF
EQUIVALENT SERIES RESISTANCE	130 Ω max
SHUNT CAPACITANCE	7 pF max
DRIVE LEVEL	100 µW max



**MECHANICAL SPECIFICATION** 



**CARRIER TAPE DIMENSIONS** 



NOTE: REFER TO EIA-481 FOR DIMENSIONS

### PACKAGING

255 mm REEL DIAMETER 12 mm TAPE WIDTH, 8 mm PITCH QUANTITY: 1000 PIECES PER REEL

**IN ACCORDANCE WITH EIA-481** 

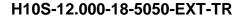
MARKING AREA

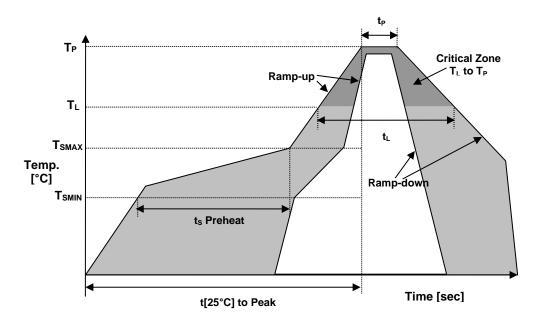


### SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 2 of 3

# • 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 <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

Page 3 of 3

### H10S-12.000-18-5050-EXT-TR

### MARKING

R12.000 xxBByw

- 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	а	19	s	37	K
2	b	20	t	38	L
3	с	21	u	39	М
4	d	22	v	40	Ν
5	e	23	w	41	0
6	f	24	х	42	Р
7	g	25	у	43	Q
8	h	26	Z	44	R
9	i	27	А	45	S
10	j	28	В	46	Т
11	k	29	С	47	U
12	1	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	Х
15	0	33	G	51	Y
16	р	34	Н	52	Z
17	q	35	Ι		
18	r	36	J		

#### APPROVAL

RALTRON		
DRAWN BY:	KJackson, June 18, 2015	
APPROVED BY:	KJackson, June 18, 2015	
REVISION:	A, Initial Release	
	B, Updated to current spec	
	leves KJ 9/12/22	

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 to ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech hoses not guarantee that the information is accurate, reliable or current. The product information is provided for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not sacure assume any liability arising out of an application or revision, at any time without notice. Raltron/RAMI Tech does not sacure assume 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, LLC.