

SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 1 of 3

H130B-24.576-22-F-EXT-TR

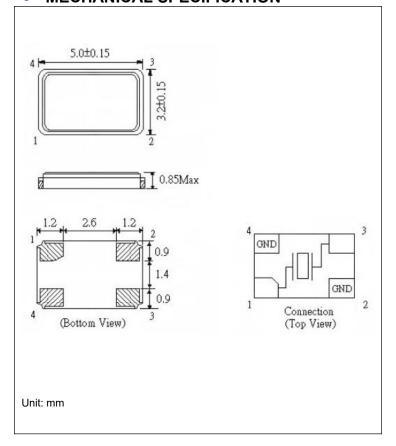
SPECIFICATIONS

PARAMETER	VALUE	
NOMINAL FREQUENCY	24.576 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 per year max	
LOAD CAPACITANCE	22 pF	
EQUIVALENT SERIES RESISTANCE	40 Ω max	
SHUNT CAPACITANCE	5 pF max	
DRIVE LEVEL	300 μW max	

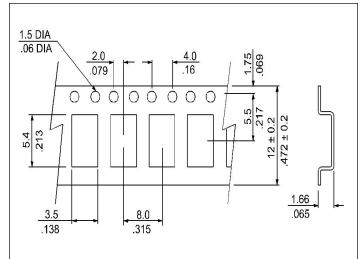


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

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

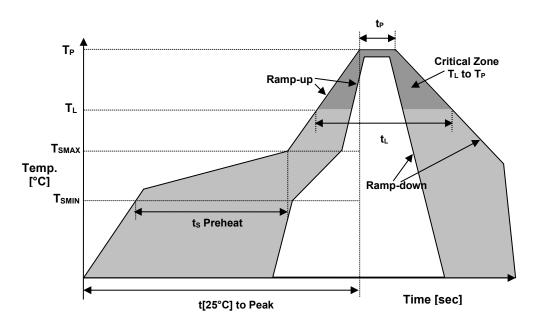
IN ACCORDANCE WITH EIA-481



Page 2 of 3

H130B-24.576-22-F-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})	ts	60-180 sec		
Temperature	TL	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	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

H130B-24.576-22-F-EXT-TR

MARKING

R24.576 xxHByw

x – Internal Production ID code

y – Year code

w - Week code

YEAR CODE		
Year	Code	
2015	5	
2016	6	
2017	7	
2018	8	
2019	9	
2020	0	
2021	1	
2022	2	
2023	3	
2024	4	
2025	5	

ALPHA WEEK CODE TABLE					
Week	Code	Week	Code	Week	Code
1	a	19	S	37	K
2	b	20	t	38	L
3	С	21	u	39	M
4	d	22	v	40	N
5	e	23	w	41	О
6	f	24	х	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	o	33	G	51	Y
16	p	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

RALTRON	
DRAWN BY:	XLiu, January 31, 2019
APPROVED BY:	JIvens, January 31, 2019
REVISION:	A, Initial Release

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 ech does not 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.