

LOW PROFILE MICROPROCESSOR CRYSTAL

Page 1 of 3

AS-4.9152-33-SMD-TR

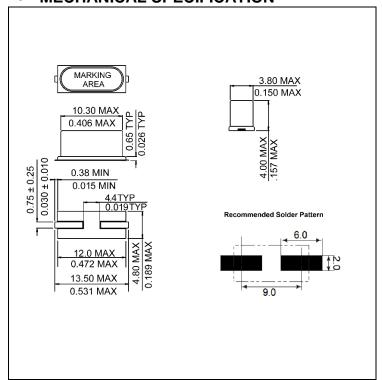
SPECIFICATIONS

PARAMETER	VALUE	
NOMINAL FREQUENCY	4.9152 MHz	
MODE OF OSCILLATION	Fundamental	
FREQUENCY TOLERANCE AT 25°C	±30 ppm max	
FREQUENCY STABILITY OVER TEMPERATURE	±50 ppm max	
OPERATING TEMPERATURE RANGE -20°C to +70°C		
STORAGE TEMPERATURE RANGE	-40°C to +85°C	
AGING	±5 ppm first year max	
LOAD CAPACITANCE	33 pF	
EQUIVALENT SERIES RESISTANCE 130 Ω max		
SHUNT CAPACITANCE 5 pF max		
DRIVE LEVEL	500 μW max	
REFLOW CONDITIONS	260°C for 10 sec max	

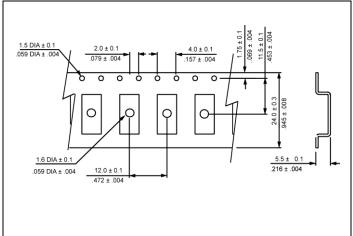


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

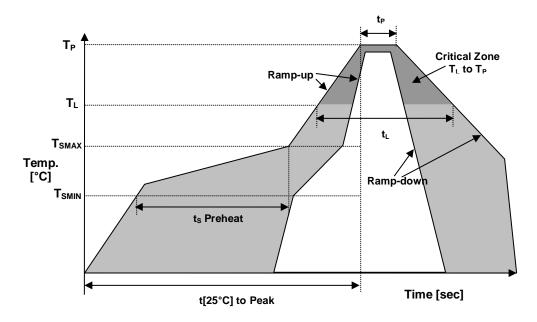
178 mm REEL DIAMETER 24 mm TAPE WIDTH, 12 mm PITCH QUANTITY: 1000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



AS-4.9152-33-SMD-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 _P	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	Sn





LOW PROFILE MICROPROCESSOR CRYSTAL

Page 3 of 3

AS-4.9152-33-SMD-TR

MARKING

R049xLyw

x - 1 or 2 digits as 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	O
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	С	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, October 9, 2014
APPROVED BY:	KJackson, October 9, 2014
	A, Initial Release
REVISION:	B, Updated to current spec levels by Xliu, May 7, 2020
	Allu, Iviay 1, 2020

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 recurrent. 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 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.