



# AS-4.9152-20-EXT-3PIN-SP-TR

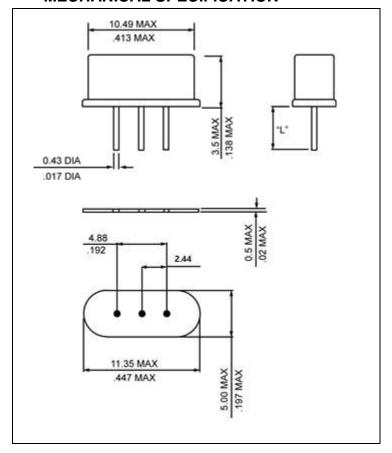
## SPECIFICATIONS

A RAMI TECHNOLOGY Company

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	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±5 ppm per year max
LOAD CAPACITANCE	20 pF
EQUIVALENT SERIES RESISTANCE	130 Ω max
SHUNT CAPACITANCE	7 pF max
DRIVE LEVEL	1000 μW max
REFLOW CONDITIONS	260°C for 10s max
INSULATION RESIATANCE	500 MΩ min @ DC 100V



## MECHANICAL SPECIFICATION



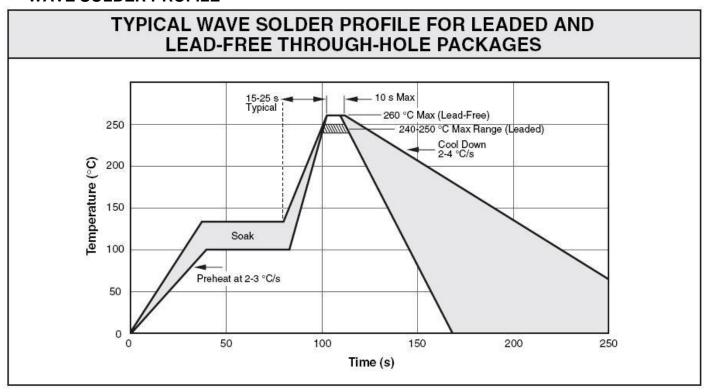
LENGTH "L" = 11.98 min Unit: mm





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### WAVE SOLDER PROFILE



Wave Solder profile				
Profile Feature	SnPb eutectic	Pb-Free		
Average ramp-up rate	~200°C/second	~200°C/second		
Heating Rate during preheat	typical 1-2°/second max 4°/second	typical 1-2°/second max 4°/second		
Final preheat temperature, T <sub>S</sub>	~130°C	~130°C		
Peak temperature, T <sub>P</sub>	235°C	260°C		
Time within +0°C / -5°C of actual temperature, t <sub>P</sub>	10 seconds	10 seconds		
Ramp-down rate	5°C/second max.	5°C/second max.		

NOTE: This document should serve as recommendation only. Other parameters may also affect soldering, this profile does not guarantee absolute success. Soldering profile should be determined by the equipment manufacturer and customers' process engineer.

#### 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

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#### AS-4.9152-20-EXT-3PIN-SP-TR

#### MARKING

R049xAyw

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	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:	A, Initial Release, April 14, 2011
APPROVED BY:	A, Initial Release, April 14, 2011
REVISION:	A, Initial Release
	B, Updated to current spec levels by
	XLiu. May 7, 2020

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