

Page 1 of 3

AS-16.000-20

SPECIFICATIONS

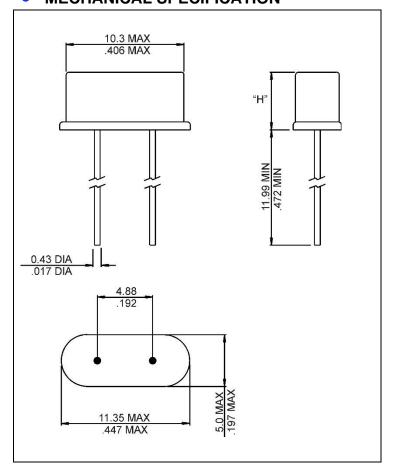
A RAMI TECHNOLOGY Company

PARAMETER	VALUE
NOMINAL FREQUENCY	16.000 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	-55°C to +125°C
AGING	±5 ppm per year max
LOAD CAPACITANCE	20 pF max
EQUIVALENT SERIES RESISTANCE	40 Ω max
SHUNT CAPACITANCE	7 pF max
DRIVE LEVEL	500 μW max
INSULATION RESISTANCE	500 MΩ min



Photo is not actual part

MECHANICAL SPECIFICATION



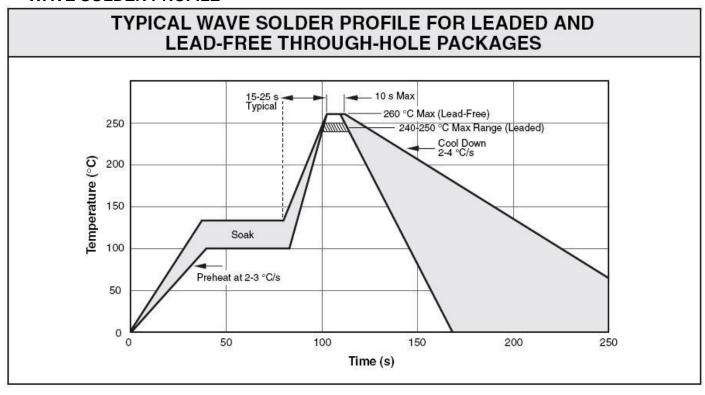
HEIGHT "H" = 3.5 mm





WAVE SOLDER PROFILE

AS-16.000-20



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, Ts	~130°C	~130°C		
Peak temperature, T _P	235°C	260°C		
Time within +0°C / -5°C of actual temperature, t _P	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

Page 3 of 3

AS-16.000-20

MARKING

R160xxAyw

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	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	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	0	33	G	51	Y	
16	р	34	Н	52	Z	
17	q	35	I			
18	r	36	J			

APPROVAL

DRAWN BY:	KJackson, April 17, 2015
APPROVED BY:	KJackson, April 17, 2015
REVISION:	A, Initial Release
	Updated to current spec levels
	by XLiu, May 20, 2019

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 does not guarantee that the information is accurate, reliable or current. The product information is provided for reference purposes only and is subject on 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, LLC.