

LOW PROFILE MICROPROCESSOR CRYSTAL

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AS-13.560-20-SMD-TR

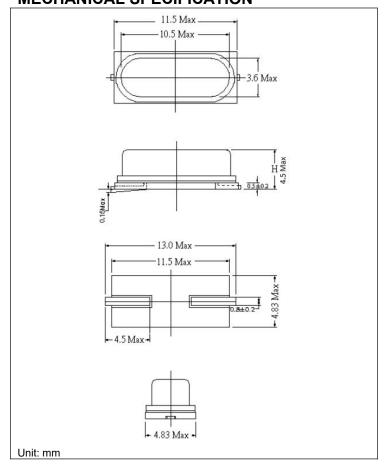
SPECIFICATIONS

PARAMETER	VALUE		
NOMINAL FREQUENCY	13.560 MHz		
MODE OF OSCILLATION	Fundamental		
FREQUENCY TOLERANCE AT 25°C ±30 ppm max			
FREQUENCY STABILITY OVER TEMPERATURE ±50 ppm max			
OPERATING TEMPERATURE RANGE	-10°C to +70°C		
STORAGE TEMPERATURE RANGE	-55°C to +125°C		
GING ±5 ppm per year max			
OAD CAPACITANCE 20 pF			
EQUIVALENT SERIES RESISTANCE 60 Ω max			
UNT CAPACITANCE 5 pF max			
DRIVE LEVEL	300 μW max		
REFLOW CONDITIONS	260°C for 10sec max		

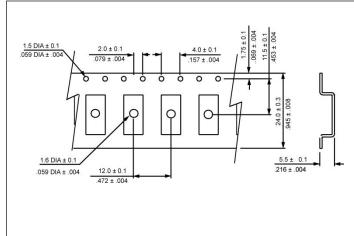


Photo is not actual par

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS

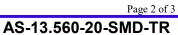


NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

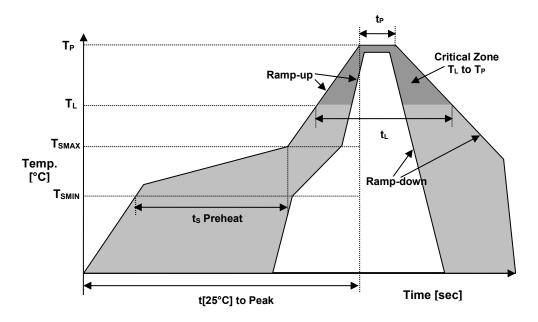
178 mm REEL DIAMETER 24 mm TAPE WIDTH, 12 mm PITCH QUANTITY: 1000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



REFLOW PROFILE

A RAMI TECHNOLOGY Company



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	T∟	217°C		
Peak Temperature	T _P	260°C		
Ramp-up rate	Rup	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	tı	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





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MARKING

R135xxAyw

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	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	р	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

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

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