

LOW PROFILE MICROPROCESSOR CRYSTAL

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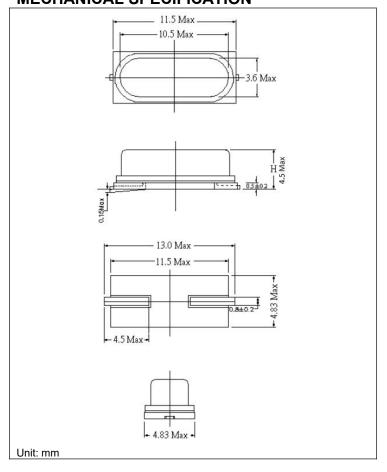
SPECIFICATIONS

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		
AGING	±5 ppm per year max		
LOAD CAPACITANCE	20 pF		
EQUIVALENT SERIES RESISTANCE	60 Ω max		
SHUNT CAPACITANCE	5 pF max		
DRIVE LEVEL	300 μW max		
REFLOW CONDITIONS	260°C for 10sec max		

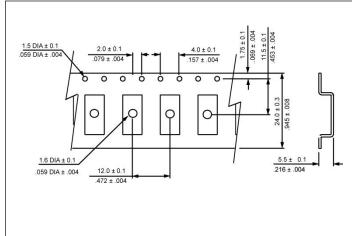


Photo is not actual pai

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

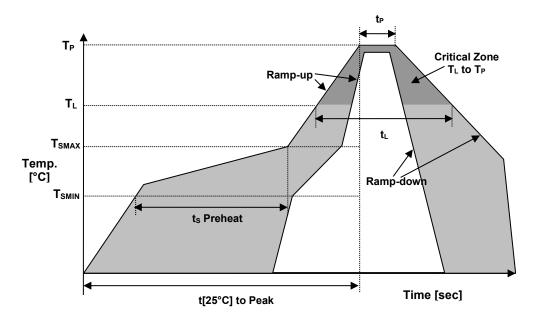
PACKAGING

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

IN ACCORDANCE WITH EIA-481

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

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