

LOW PROFILE MICROPROCESSOR CRYSTAL Page 1 of 3

AS-14.31818-20-SMD-TR

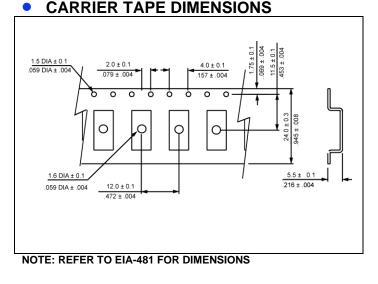
SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	14.31818 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 first year max
LOAD CAPACITANCE	20 pF
EQUIVALENT SERIES RESISTANCE	50 Ω max
SHUNT CAPACITANCE	5 pF max
DRIVE LEVEL	1000 µW max
INSULATION RESISTANCE	500 MΩ min @ DC 100V



Photo is not actual part

MECHANICAL SPECIFICATION MARKING 3.80 MAX AREA 0.150 MAX 10.30 MAX 0.406 MAX 0.65 4.00 MAX 157 MAX ło 0.75 ± 0.25 0.030 ± 0.010 0.38 MIN 0.015 MIN 4.4TYP 0.019TYP Recommended Solder Pattern 6.0 4.80 MAX 0.189 MAX 12.0 MAX 1N 0 0.472 MAX 13.50 MAX 6 0.531 MAX 9.0



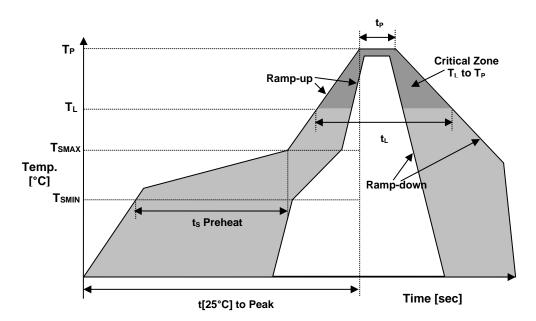
PACKAGING

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

IN ACCORDANCE WITH EIA-481



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	TL	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	tL	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





MARKING

R143xAyw

- x 1 or 2 digits as Internal Production ID code
- y Year code
- w Week code

YEAR CODE		
Year	Code	
2018	8	
2019	9	
2020	0	
2021	1	
2022	2	
2023	3	
2024	4	
2025	5	
2026	6	
2027	7	
2028	8	
2029	9	

	ALPHA WEEK CODE TABLE				
Week	Code	Week	Code	Week	Code
1	а	19	s	37	K
2	b	20	t	38	L
3	с	21	u	39	М
4	d	22	v	40	Ν
5	e	23	w	41	0
6	f	24	х	42	Р
7	g	25	У	43	Q
8	h	26	z	44	R
9	i	27	А	45	S
10	j	28	В	46	Т
11	k	29	С	47	U
12	1	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	Х
15	0	33	G	51	Y
16	р	34	Н	52	Z
17	q	35	Ι		
18	r	36	J		

APPROVAL

DRAWN BY:	KJackson, Sept. 12, 2016
APPROVED BY:	KJackson, Sept. 12, 2016
REVISION:	A, Initial Releas B, Updated to current spec levels by XLiu, October 30, 2020

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