

R2016-32.000-10-F-1010-TR-B1B

SPECIFICATIONS

PARAMETER	VALUE		
NOMINAL FREQUENCY	32.000 MHz		
MODE OF OSCILLATION	Fundamental		
FREQUENCY TOLERANCE AT 25°C	TOLERANCE AT 25°C ±10 ppm max		
FREQUENCY STABILITY OVER TEMPERATURE	±10 ppm max		
OPERATING TEMPERATURE RANGE -30°C to +70°C			
STORAGE TEMPERATURE RANGE	-40°C to +85°C		
AGING ±3 ppm per year max			
LOAD CAPACITANCE	10 pF		
EQUIVALENT SERIES RESISTANCE	40 Ω max	Û	
SHUNT CAPACITANCE	2 pF max		
UNWANTED MODE	From Fn to Fn +500kHz		
Rp/R1 2 min			
DRIVE LEVEL 100 µW max			
G-SENSITIVITY	2 ppb/g max		
SHOCK RESISTANCE	±5 ppm max 75 cm drop test on a hard wood surface		
REFLOW CONDITIONS	260°C for 10s max		

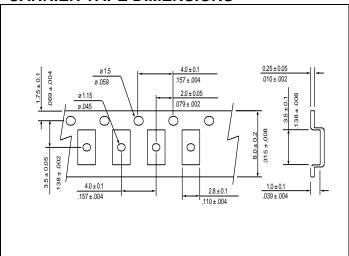


Photo is not actual part

MECHANICAL SPECIFICATION

2.0 ± 0.2 TOP VIEW .079 ± .008 GND 4 MARKING AREA 0.50 MAX .020 MAX GND LAND PATTERN 0.65 .030 .026 .028 0.55 **BOTTOM VIEW** Tolerance: ±0.1mm/0.004" if nothing else specified Note: According to ceramic base availability the Chamfer location could be on a different pin. However, the Chamfer's location does not influence the electrical performance of the crystal.

CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

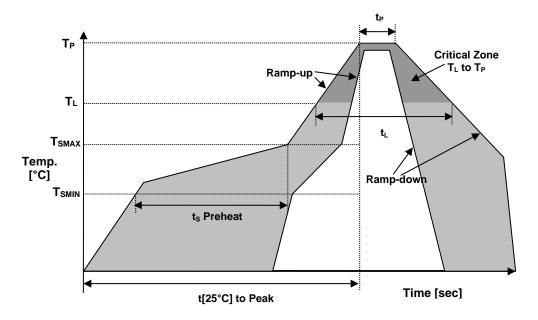
178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 1000 PIECES PER REEL

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})	t _S	60-180 sec.	
Temperature	T∟	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	t _L	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	Au





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MANNING

R320 XKyw

x – Internal Production ID code

y – Year code

w - Week code

YEAR CODE		
Year	Code	
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	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	p	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

	-	
DRAWN BY:	KJackson, February 9, 2016	
APPROVED BY:	KJackson, February 9, 2016	
	A, Initial Release	
REVISION:	C, CP August 23, 2018 Corrected ESR and Shunt	
	Capacitance Values	
	D, CP October 02, 2018 Added G sensitivity	
	E, AR February 17, 2021	
	Updated the Current Revision Levels	

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