

● SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 ±0.015 ppm/°C <sup>2</sup>
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	50 kΩ max
DRIVE LEVEL	0.1 μW typ
SHUNT CAPACITANCE	1.4 pF typ, 3pF max
AGING	±5 ppm per year max
INSULATION RESISTANCE	500 MΩ min @ DC 100V
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C

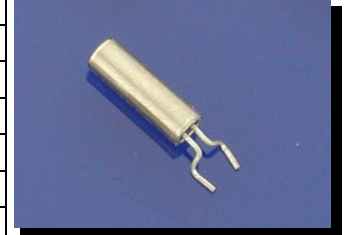
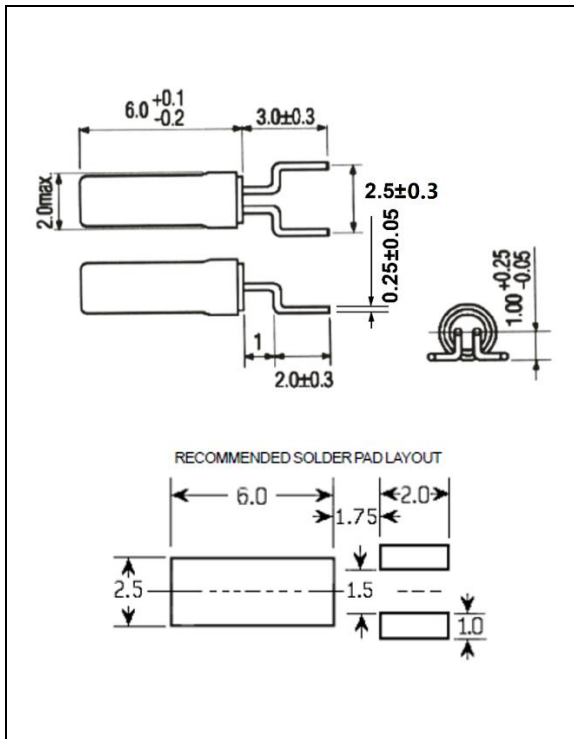
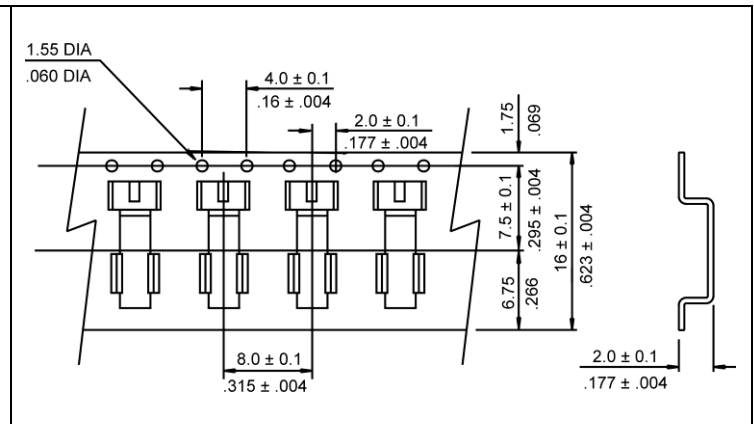


Photo is not actual part

● MECHANICAL SPECIFICATION



● CARRIER TAPE DIMENSIONS



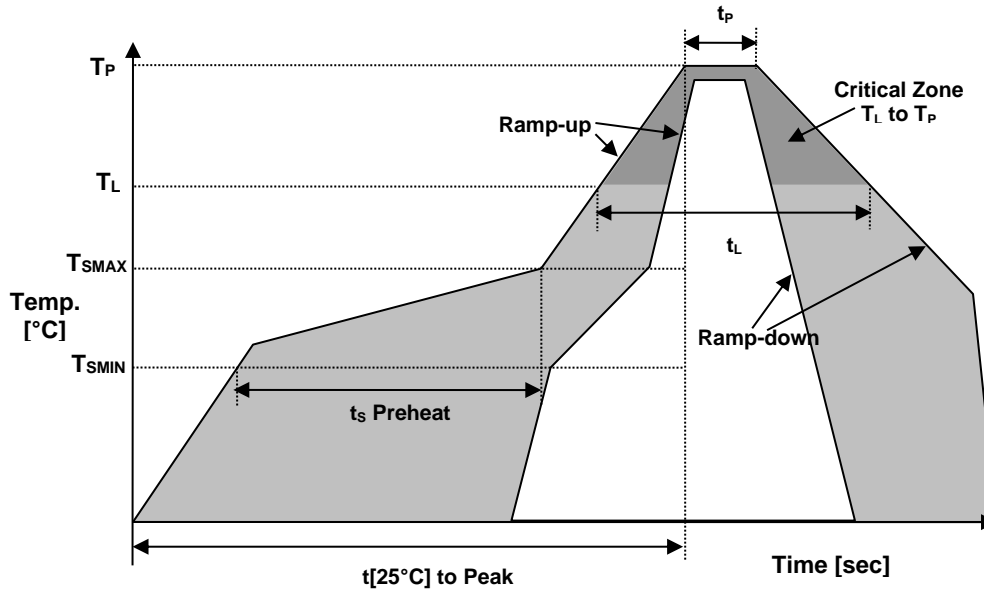
NOTE: REFER TO EIA-481 FOR DIMENSIONS

● PACKAGING

330 mm REEL DIAMETER  
 16 mm TAPE WIDTH, 8 mm PITCH  
 QUANTITY: 3000 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	$T_L$	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



## MARKING

x3FmyR

x – 1 or 2 digits as Internal Production ID code

m – Month code

y – Year 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

MONTH CODE	
MONTH	CODE
JANUARY	A
FEBRUARY	B
MARCH	C
APRIL	D
MAY	E
JUNE	F
JULY	G
AUGUST	H
SEPTEMBER	J
OCTOBER	K
NOVEMBER	L
DECEMBER	M

## APPROVAL

DRAWN BY:	KJackson, July 29, 2015
APPROVED BY:	KJackson, July 29, 2015
REVISION:	A, Initial Release B, CP August 8, 2016 Changed Pins Material C, Updated to current spec levels by XLiu, March 12, 2021 D, Updated the Mechanical Specification by AR, May 09, 2022 E, Updated the Mechanical Specification by AR, May 17, 2022 F, Updated the mechanical specification by XLiu, September 8, 2023

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