

● SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	+25 ± 5°C
TEMPERATURE COEFFICIENT	-0.04 ppm / °C ² max
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±3 ppm first year max
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	70 kΩ max
SHUNT CAPACITANCE	1.1 pF typ
DRIVE LEVEL	0.5 μW max
SHOCK RESISTANCE	±5ppm max 75 cm drop test onto a hard wood surface
INSULATION RESISTANCE	500 MΩ min @ DC 100V

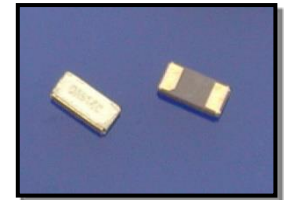
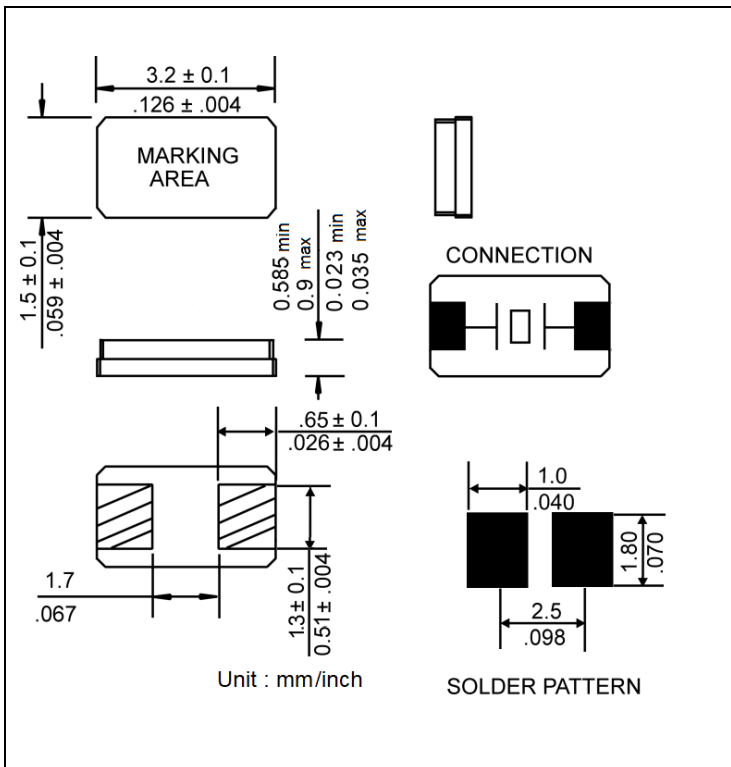
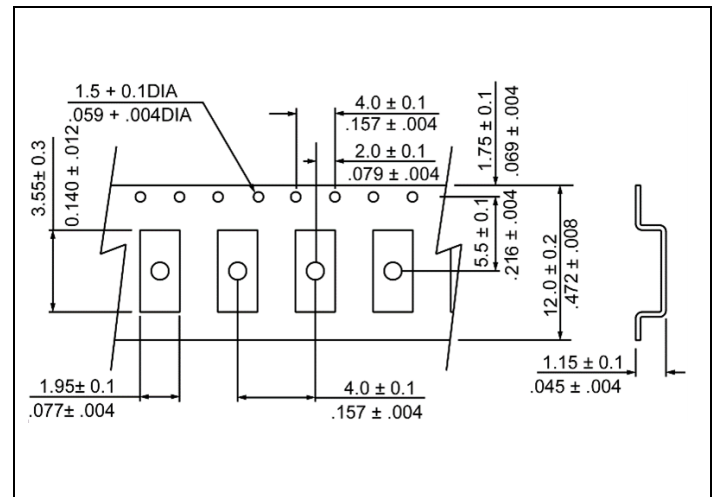


Photo not actual part

● MECHANICAL SPECIFICATION



● CARRIER TAPE DIMENSIONS



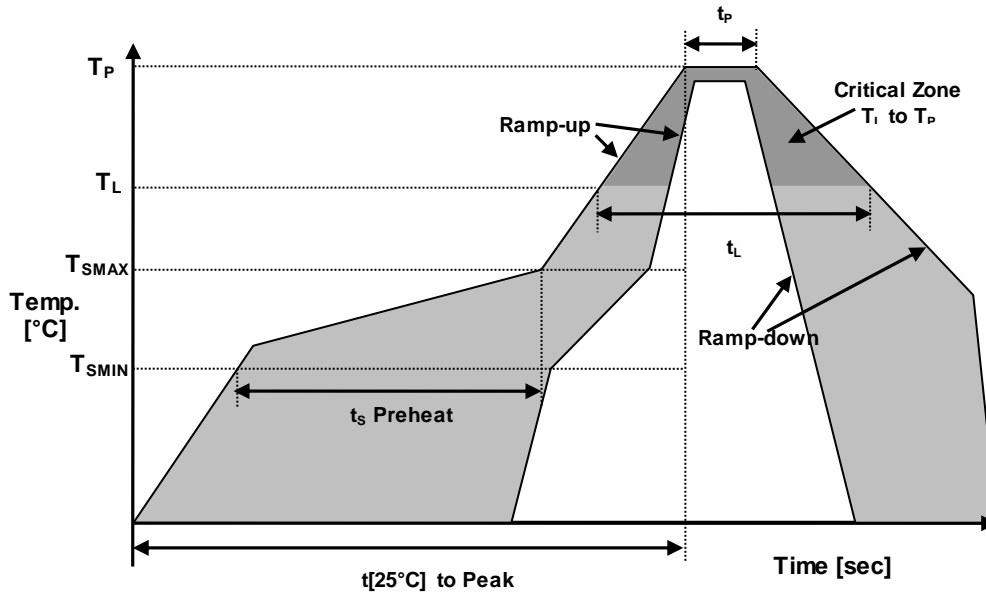
NOTE: REFER TO EIA-481 FOR DIMENSIONS

● PACKAGING

330 mm REEL DIAMETER
 8 mm TAPE WIDTH, 4 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 $t_{[25^\circ\text{C}]}$ to Peak Temperature	$t_{[25^\circ\text{C}]}$ 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

Xywwx

X – Internal Production ID code (J, R, T, Y, M, R, N)
 y – Year code
 ww – Week code
 x – 1 or 2 digits as Lot code



ymxxx

y – Year code
m – Month code, Jan ~ Sep: 1 ~ 9, Oct: X Nov: Y Dec: Z
xxx – Lot code

XLzymbd

X – Internal Production ID code (J, R, T, Y, M, R, N)
L – Load capacitance code (A: 12.5pF B: 9pF C: 7pF Z: others)
z – Lot code
y – Year code
m – Month code, Jan ~ Sep: 1 ~ 9, Oct: X Nov: Y Dec: Z
d – Day cod

XzymFxx

X – Internal Production ID code (J, R, T, Y, M, R, N)
z – Frequency code
y – Year code
m – Month code, Jan ~ Sep: 1 ~ 9, Oct: X Nov: Y Dec: Z
xx – Lot code

APPROVAL

Table with 2 columns: Field (Drawn By, Approved By, Revision) and Content (A, Initial Release; FP, 20 November 2013; A, Initial Release CP, May 04, 2017 Updated to current spec level F, CP March 27,2018 Added PN System G, CP, March 27, 2018 Updated the Marking System H, KJ June 25, 2018 Updated Marking System I, CP August 29, 2018 Updating Marking System J, YG Jiao, July 2, 2019 Remove Marking system K, Updated to current spec levels by XLiu, April 30, 2020 L, Updated to current spec levels by XLiu, June 4, 2020 M, CP, June 24, 2020. Updated C0,C1 and ESR N, CP, June 29, 2020 Completed the Revision Level Changes P, CP, September 6, 2021 Updated to the current spec levels R, CP, September 13, 2021 Added Shock Resistance)

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