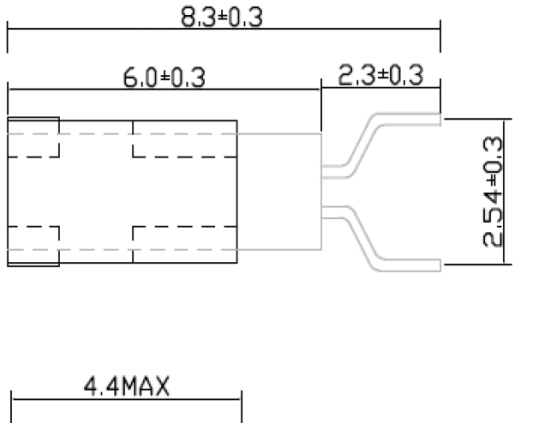
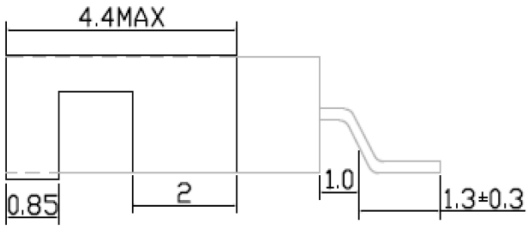
R26-32.768-12.5-X-CLIP-TR-NS1

SPECIFICATIONS

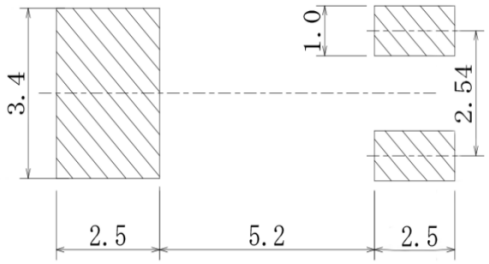
PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 ±0.006 ppm/Δ°C^2
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	50 kΩ max
DRIVE LEVEL	1 µW max
SHUNT CAPACITANCE	0.9 ~ 2 pF, 1.35 pF typ
MOTIONAL CAPACITANCE	2.3 fF typ
CAPACITANCE RATIO	450 typ
AGING	±5 ppm first year max
QUALITY FACTOR	75,000 typ
INSULATION RESISTANCE	500 MΩ min @ DC 100V
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C

MECHANICAL SPECIFICATION



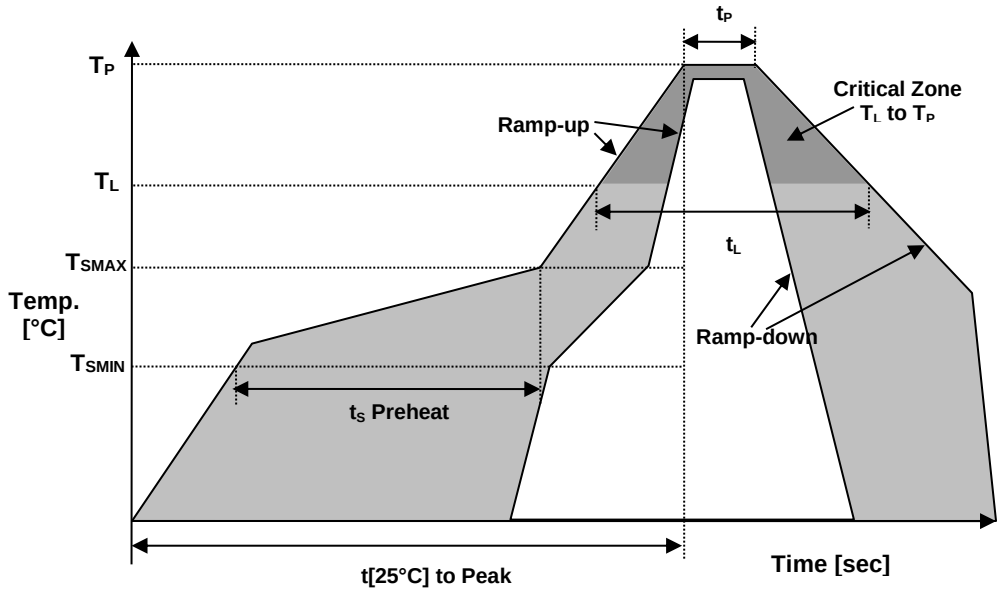


RECOMMENDED LAND PATTERN



Unit: mm

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 with Exemption 7a
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au

MARKING

32.768

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:	Initial Release
APPROVED BY:	WM, April 16, 2008
REVISION:	A, Initial Release B, AR, March 23, 2022 Updated Equivalent Series Resistance C, Updated to current spec levels by XLiu, May 26, 2022 D, Updated mechanical specification by AR,July 11 2022