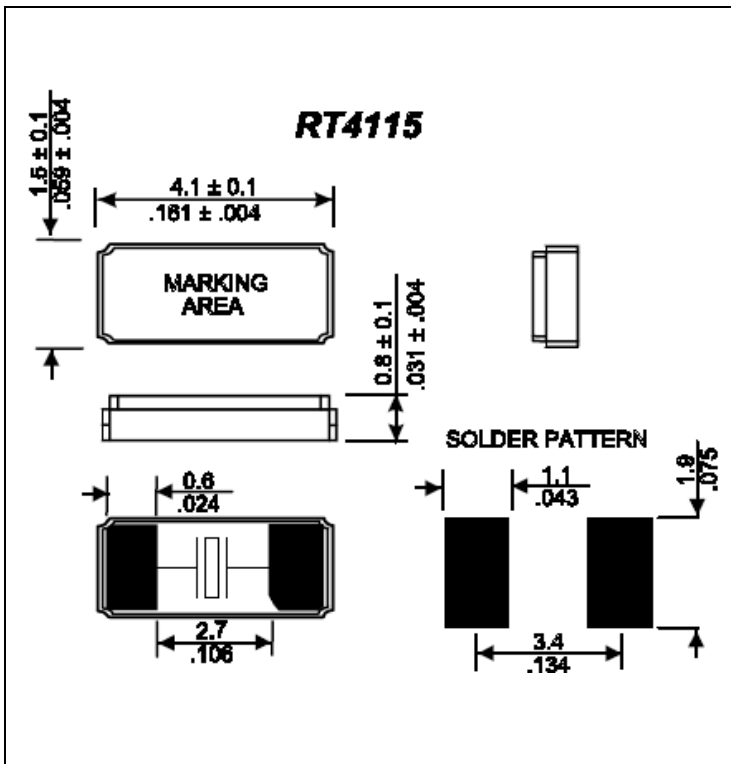


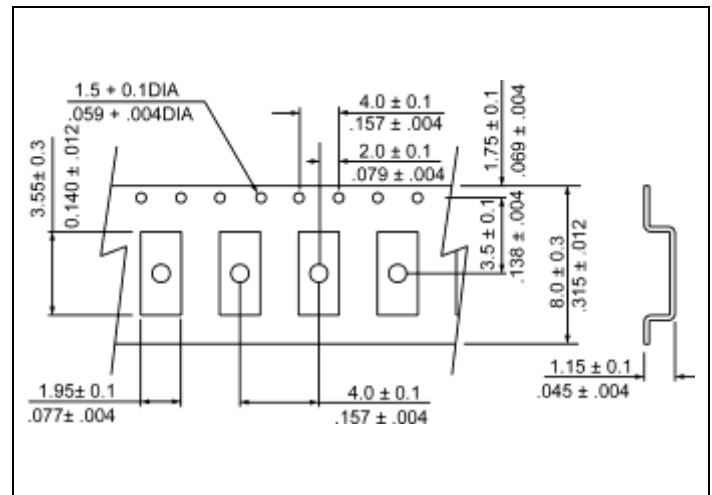
● SPECIFICATIONS

PARAMETER	VALUE
FREQUENCY RANGE	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±10 ppm max
TURNOVER TEMPERATURE	+25 ±5°C
TEMPERATURE COEFFICIENT	-0.04 x 10 ⁻⁶ /Δ °C ² max
SHUNT CAPACITANCE	1.5 pF typ
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	65 kΩ
DRIVE LEVEL	1.0 μW max
AGING	±3 ppm/year max
OPERATING TEMPERATURE RANGE	-40°C TO +85°C
STORAGE TEMPERATURE RANGE	-55°C TO +125°C
INSULATION RESISTANCE	500 MΩ MAXIMUM

● MECHANICAL SPECIFICATION



● CARRIER TAPE DIMENSIONS



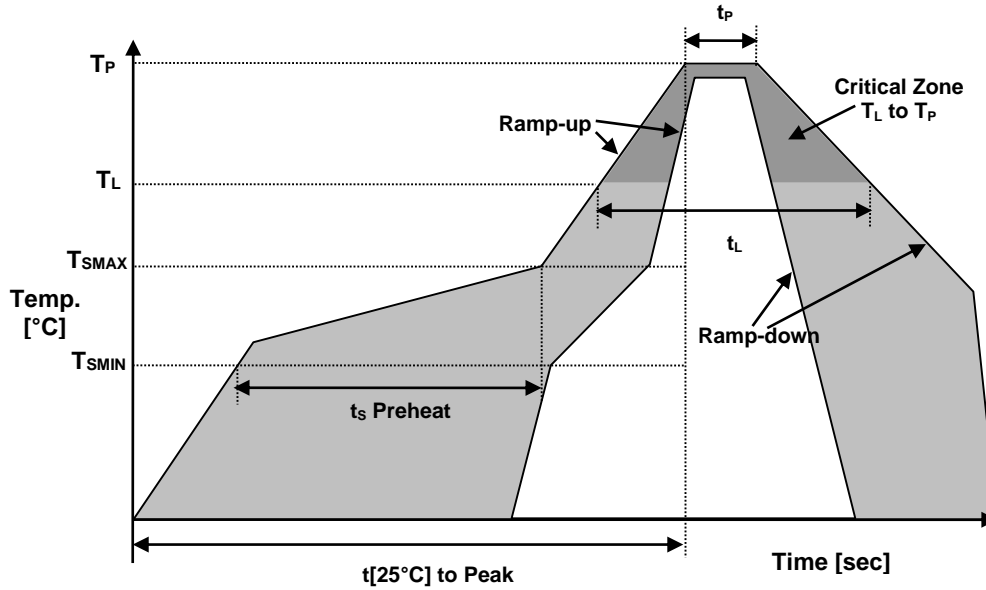
NOTE: REFER TO EIA-481 FOR DIMENSIONS

● 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}	125°C
Temperature Max Preheat	T_{SMAX}	150°C
Time (T_{SMIN} to T_{SMAX})	t_s	30-60 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	230°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	120 sec.
Time	t_L	60-150 sec.

● ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS-2	6/6 COMPLIANT
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au



● MARKING

R4x1ym

x – Internal Production ID code
 y – Year code
 m – Month code

YEAR CODE	
Year	Code
2011	1
2012	2
2013	3
2014	4
2015	5
2016	6
2017	7
2018	8
2019	9

ALPHA MONTH CODE TABLE	
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:	CP, January 19, 2015
Approved By:	CP, January 19, 2015
Revision:	A, Initial Release