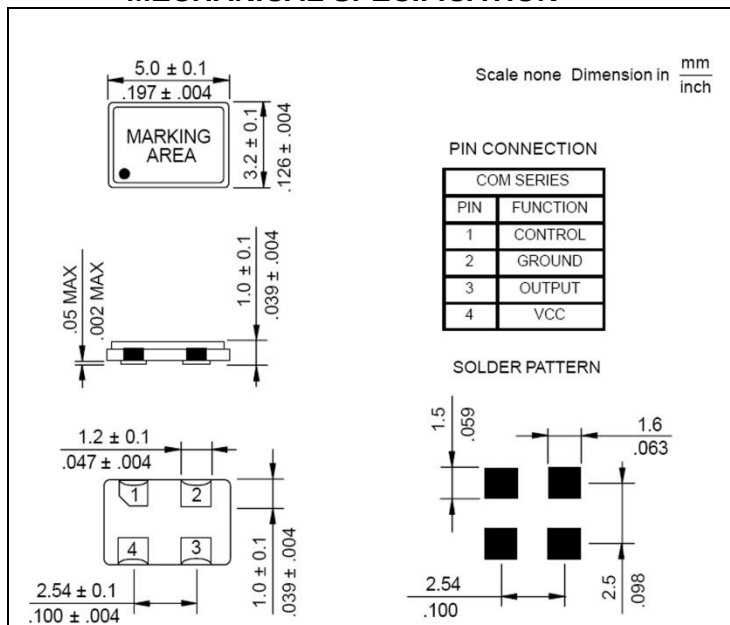


ELECTRICAL SPECIFICATION

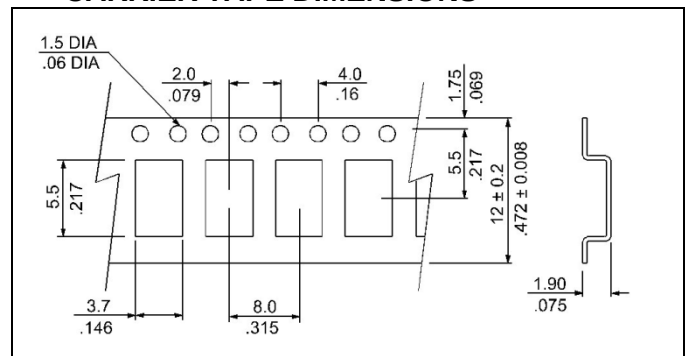
PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	f_0	$T_a=25^{\circ}\text{C}$	0.032768	MHz
Supply voltage range	V_{CC}	---	3.3V	VDC
Supply current, max	I_s	$T_a=25^{\circ}\text{C}$	10	mA
Operating temperature	T_a	---	-40 to +85	$^{\circ}\text{C}$
Storage temperature	$T_{(stg)}$	Absolute max	-55 ~ +125	$^{\circ}\text{C}$
Frequency Tolerance	$\Delta f/f_0$	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load, Aging, Shock and Vibration	± 25	ppm
Output Voltage	V_{OL}	Logic "0" Level	$0.1 \times V_{CC}$	VDC
	V_{OH}	Logic "1" Level	$0.9 \times V_{CC}$	VDC
Output Load	---	CMOS Output	15	pF
Enable / Disable Function	E/D	Pin 1: N.C. (Open) or High	Pin 3 – Oscillation (Enabled)	
		Pin 1: Low	Pin 3 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% Vdd	45 to 55	%
Rise Time and Fall Time	t_r / t_f	@10% to 90% Vdd	5	ns
Enable/Disable Time	---	---	100	ns
Jitter, RMS, max	---	12kHz to 20MHz	1	ps
Stand-by Current	$I_{(std-by)}$	---	10	μA

MECHANICAL SPECIFICATION



NOTE: A capacitor of 0.01 μF between Vcc and Ground is recommended

CARRIER TAPE DIMENSIONS



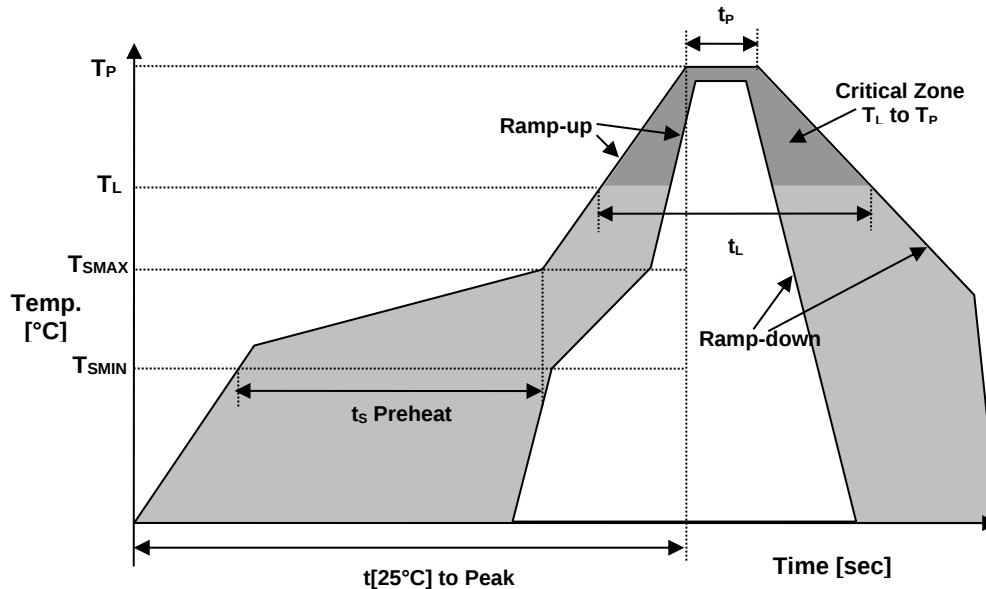
NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

PACKAGING

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

IN ACCORDANCE WITH EIA-481

REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T _S MIN	150°C
Temperature Max Preheat	T _S MAX	200°C
Time (T _S MIN to T _S MAX)	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
RoHS2	6/6 COMPLIANT & LEAD FREE
REACH-SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
TERMINATION FINISH	Au





A **RAMI TECHNOLOGY** Company

CLOCK OSCILLATOR

Page 3 of 4

COM23025-0.032768-EXT-T-TR

Rev B

• MARKING

Rx0.03T

•3Ayw

x – Internal Production ID code

y – Year code

w – Week code

YEAR CODE	
Year	Code
2011	1
2012	2
2013	3
2014	4
2015	5
2016	6
2017	7
2018	8
2019	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	O
6	f	24	x	42	P
7	g	25	y	43	Q
8	h	26	z	44	R
9	i	27	A	45	S
10	j	28	B	46	T
11	k	29	C	47	U
12	l	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	o	33	G	51	Y
16	p	34	H	52	Z
17	q	35	I		
18	r	36	J		

• APPROVAL

RALTRON	
DRAWN BY:	KJackson, March 20, 2015
APPROVED BY:	KJackson, March 20, 2015
REVISION:	A, Initial Release
	B CP, December 07, 2015
	Added Jitter value



A **RAMI TECHNOLOGY** Company

CLOCK OSCILLATOR

Page 4 of 4

COM23025-0.032768-EXT-T-TR

Rev B

Raltron Electronics/RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort to ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.