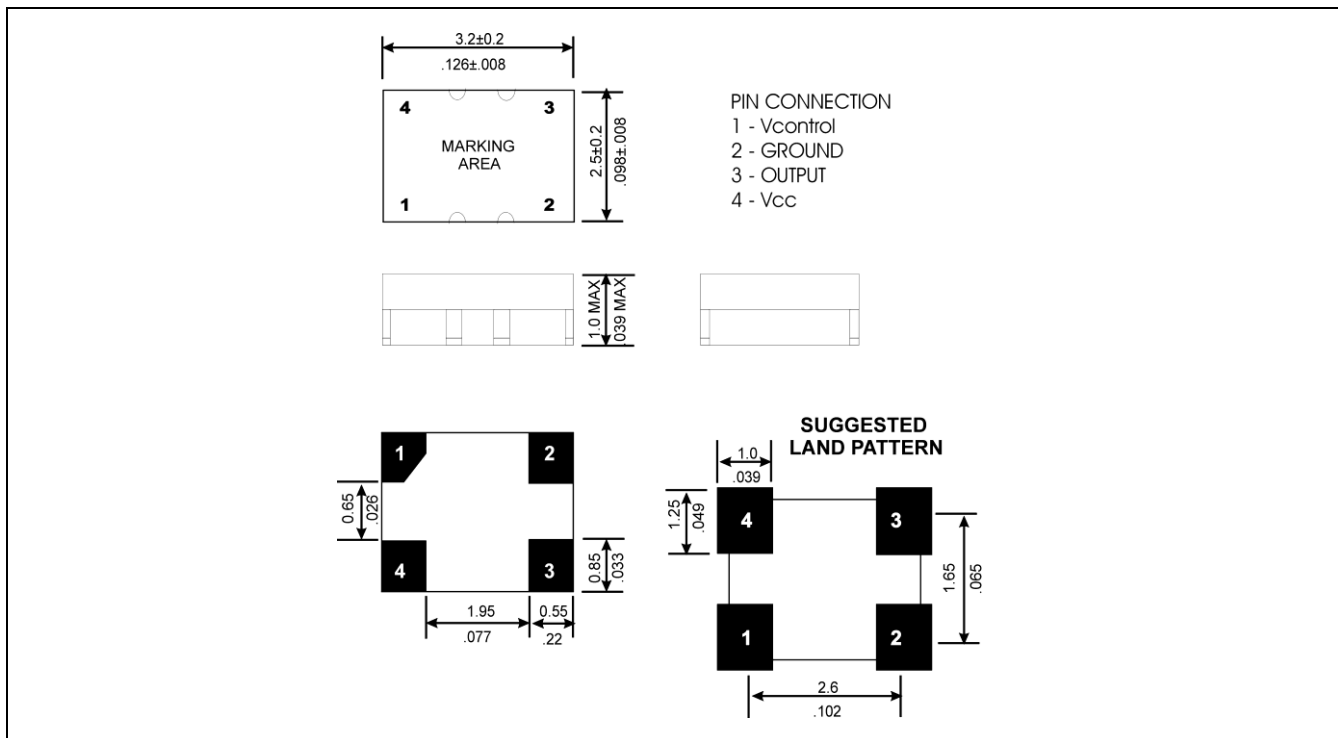


### ELECTRICAL SPECIFICATION

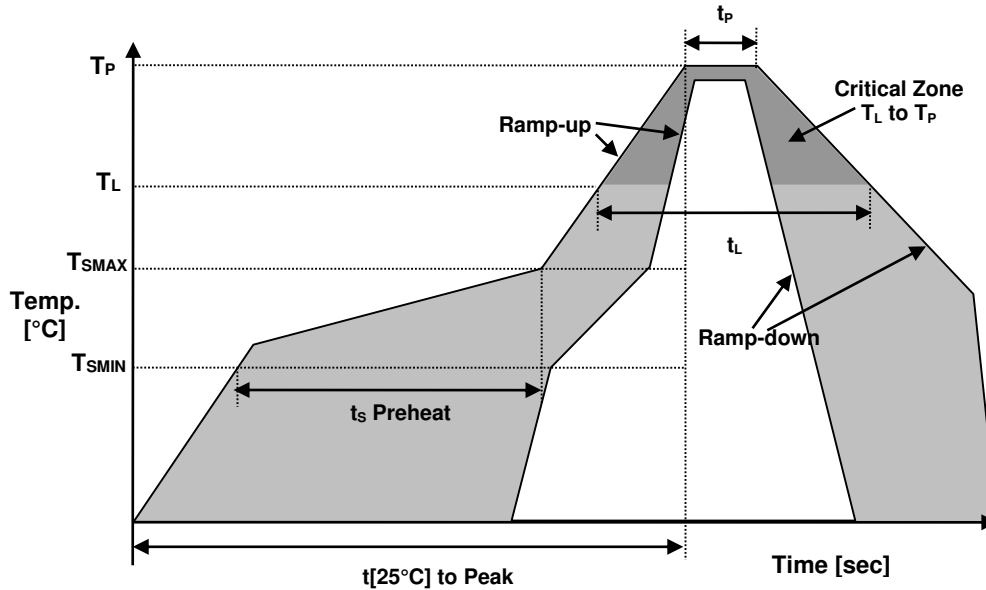
PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_o$	$V_{cc} \pm 5\%$	19.200	MHz
Supply voltage, nom.	$V_{CC}$	$V_{CC} \pm 5\%$ ,	2.8	VDC
Supply current, max	$I_s$	$V_{CC} \pm 5\%$	1.5	mA
Operating temperature	$T_a$		-30 ~ +85	°C
Storage temperature	$T(stg)$	Absolute max	-40 ~ +90	°C
Frequency Stability				
vs. Temperature, Max	$\Delta f/f_o(T_a)$	Reference to +25°C over -30°C to +85°C	±0.5	ppm
vs. Supply Voltage, Max	$\Delta f/f_V$	$V_{CC} \pm 5\%$	±0.2	ppm
vs. Load, Max	$\Delta f/f_L$	Load ±10%	±0.2	ppm
vs. Aging, Max	$\Delta f/f_o(\text{per year})$	1 Year at +25°C ± 2°C	±1.0	ppm
Initial Frequency Calibration, Max	$f_c$	Measured at 25°C, Reference to $f_o$	±2.0	ppm
Output Level, Clipped Sine Wave, Minimum	-	10K Ohms // 10 pF ±10%	0.8	V <sub>P-P</sub>
Voltage Control Range	$V_c$	$V_c = 0.5V_{dc}$ to 2.5Vdc	±8 to ±15	ppm

### MECHANICAL SPECIFICATION



NOTE: Add a 1000 pF DC-cut capacitor to the output pad of the TCXO.

### 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	$t_{[25^\circ\text{C}] \text{ to Peak}}$	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



### MARKING

Rxx19.2  
•AF328yw

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, August 12, 2014
APPROVED BY:	KJackson, August 12, 2014
REVISION:	A, Initial Release