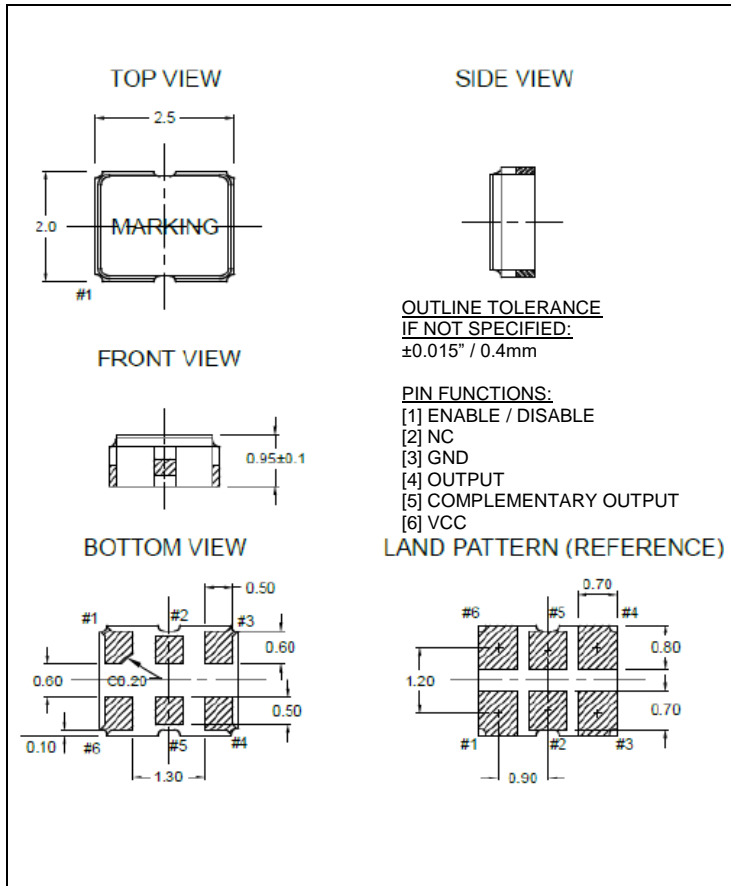


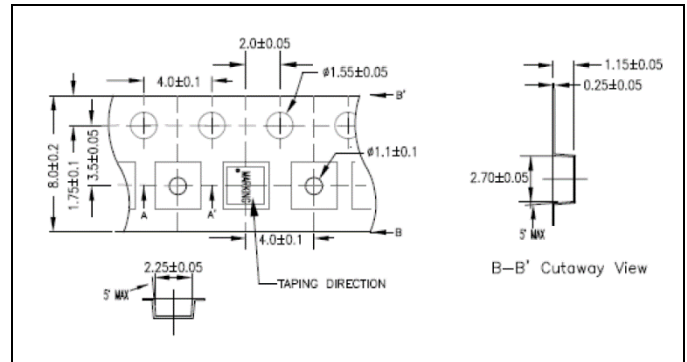
ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT	
Nominal Frequency	f_o	Ta=25°C	156.250	MHz	
Oscillation Mode			Fundamental	-	
Supply Voltage	V _{CC}	V _{CC} ±5%	2.5 ~ 3.3	VDC	
Supply Current, typ/max	I _S	V _{CC} ; Ta=+25°C;	40 / 60	mA	
Operating Temperature Range	T _a	---	-40 ~ +85	°C	
Storage Temperature Range	T _(stg)	Absolute max	-55 ~ +125	°C	
Output Logic Type	---		LVPECL		
Freq. Stability, max	$\Delta f/f_o$	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load Variation and Aging	±50	ppm	
Output Voltage	V _{OH}	Logic "1" Level, min	V _{CC} -1.075	VDC	
	V _{OL}	Logic "0" Level, max	V _{CC} -1.550	VDC	
Output Load	---	50 Ω to V _{CC} -2V	50	Ω	
Enable / Disable Function	E/D	Pin 1: High, Pins 4 & 5 – Oscillation (Enabled), min	0.7 x V _{CC}	V	
		Pin 1: Low, Pins 4 & 5 – High Impedance (Disabled), max	0.3 x V _{CC}	V	
Symmetry (Duty Cycle)	DC	@50% V _{DD}	45 ~ 55	%	
Rise and Fall Time, typ/max	t _r / t _f	@20% to 80% V _{DD}	0.25 / 0.4	ns	
Standby Current, max	I _{st}		10	μA	
Start up Time, max	T _{start}		2	ms	
Jitter, RMS, max	J	1σ, 12kHz < F _J < 20MHz	50	fs	
Phase Noise, typ	£ (Δf)		2.5V	3.3V	dBc/Hz
		@ 10Hz	-72.42	-72.39	
		@ 100Hz	-102.38	-102.20	
		@ 1KHz	-131.81	-131.89	
		@ 10KHz	-149.72	-152.46	
		@ 100KHz	-156.79	-159.63	
		@ 1MHz	-162.31	-163.83	
		@ 40MHz	-164.84	-166.38	

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS

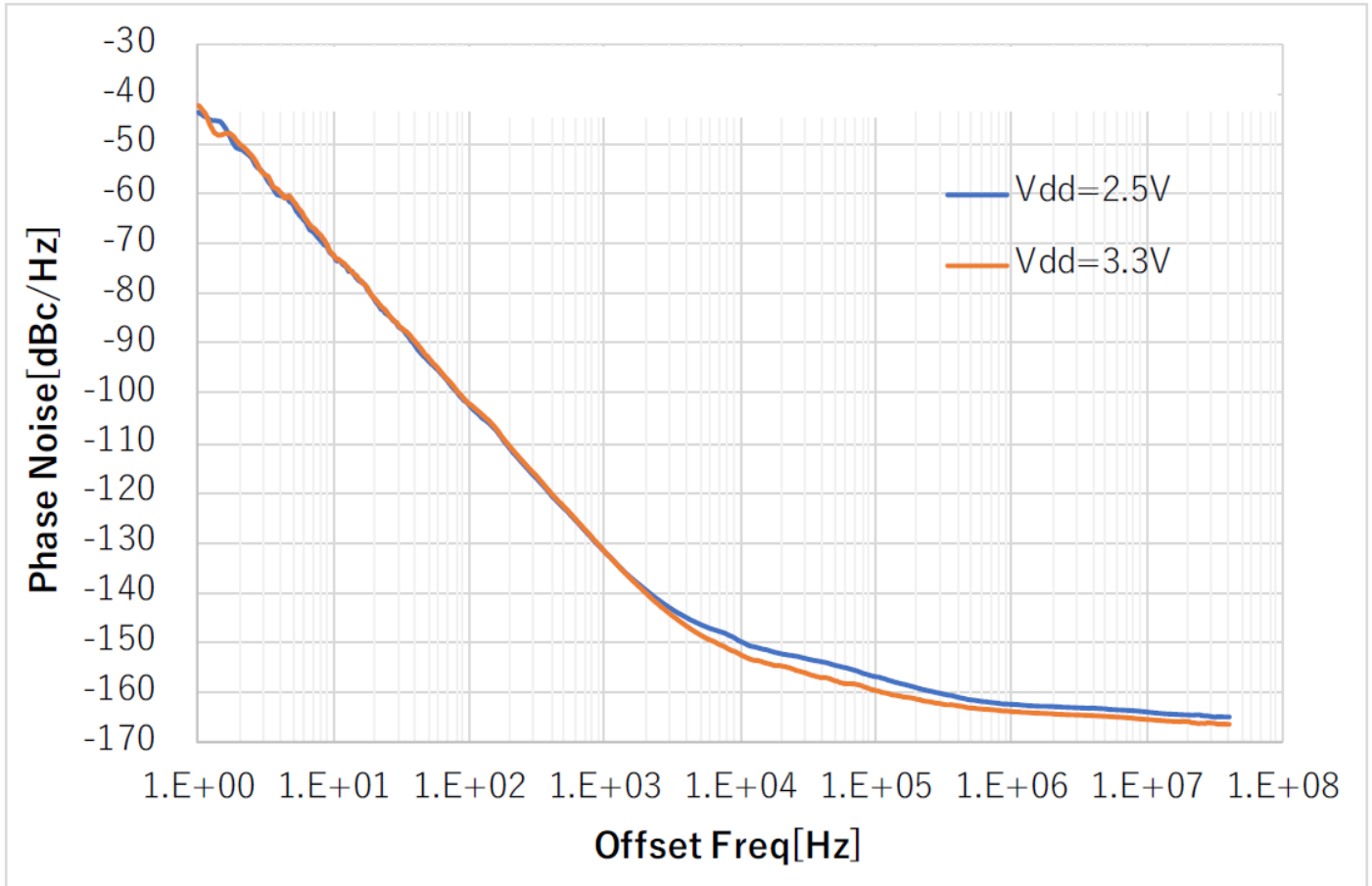


NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

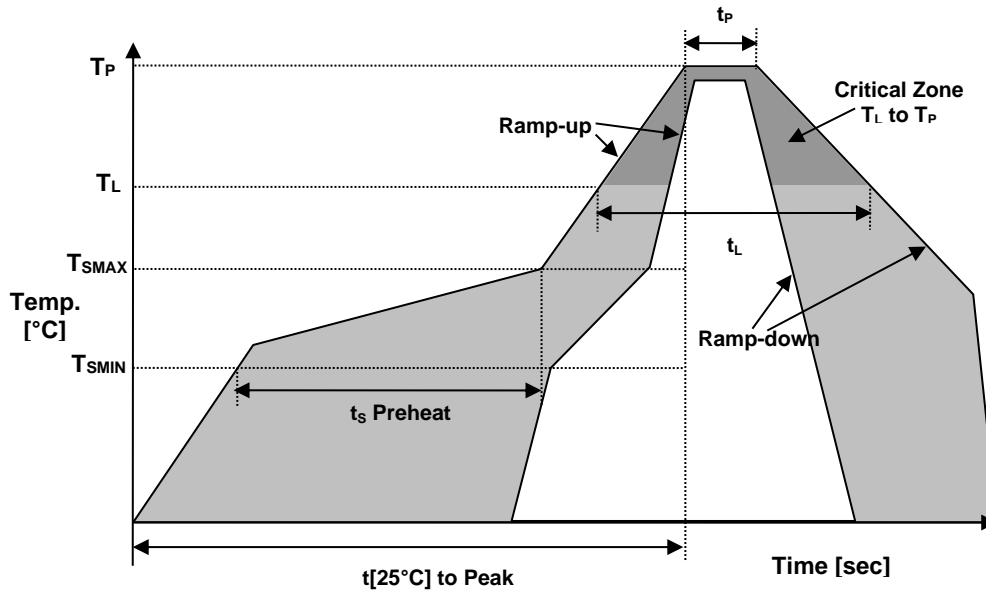
PACKAGING

180 mm REEL DIAMETER
8 mm TAPE WIDTH, 4 mm PITCH
QUANTITY: 3000 PIECES PER REEL

■ PHASE NOISE GRAPH



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
TERMINATION FINISH	Au



■ MARKING

Rxx156
•JBeyw

x – Internal Production ID code
y – Year code
w – Week code

YEAR CODE	
Year	Code
2019	9
2020	0
2021	1
2022	2
2023	3
2024	4
2025	5
2026	6
2027	7
2028	8
2029	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		
18	r	36	J		

■ APPROVAL

RALTRON	
DRAWN BY:	JS, February 14, 2025
APPROVED BY:	CP, February 14, 2025
REVISION:	A, Initial Release

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