

CLOCK OSCILLATOR

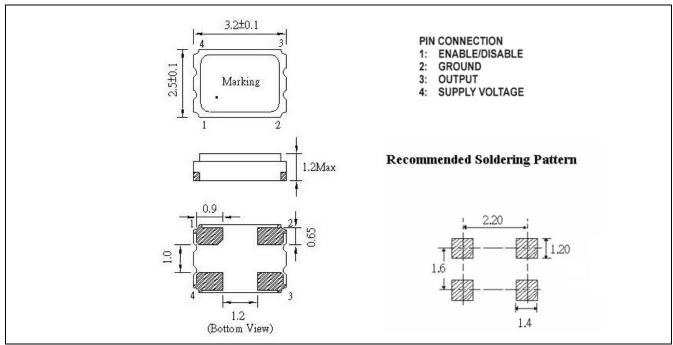
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COM118025-25.000-X-T-TR-NS1

ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	fo	Ta=25°C	25.000	MHz
Supply Voltage	V _{cc}	V _{CC} ±10%	1.8	VDC
Supply Current, max	Is	Ta=25°C	20	mA
Operating Temperature Range	Ta		-40 ~ +85	°C
Storage Temperature Range	T _(stg)	Absolute max	-55 ~ +125	°C
Frequency Tolerance, max	Δf/fo	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load, Aging	±25	ppm
Output Voltage	Vol	Logic "0" Level	0.1 x Vcc	VDC
	Voн	Logic "1" Level	0.9 x Vcc	VDC
Output Load, max		CMOS Output	15	pF
Enable / Disable Function	E/D	Pin 1: High or NC Pin 3 – Oscillation (Enabled), min	0.7 x Vcc	V
	E/D	Pin 1: Low, Pin 3 – High Impedance (Disabled), max	0.3 x Vcc	V
Symmetry (Duty Cycle)	DC	@50% Vdd	45 ~ 55	%
Rise Time and Fall Time, max	tr / tf	@10% to 90% Vdd	3	ns
Stand-by Current, max	I(std)		10	μΑ
Start-up Time, max	ts	V _{OUT} ≥ 90% V _{P-P}	10	ms
Jitter, RMS, max	J	@12kHz ~ 20MHz	1	ps

■ MECHANICAL SPECIFICATION



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

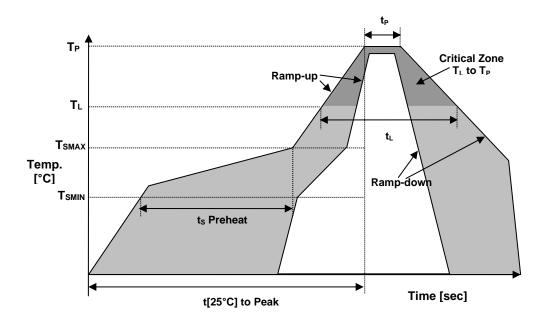


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REFLOW PROFILE



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
REACH-SVHC	Compliant
HALOGEN-FREE	Compliant
TERMINATION FINISH	Au





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MARKING

Rx25.00T •1Ayw

x – Internal Production ID code

y - Year code

w - Week 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	

ALPHA WEEK CODE TABLE					
Week	Code	Week	Code	Week	Code
1	а	19	S	37	K
2	b	20	t	38	L
3	С	21	u	39	М
4	d	22	٧	40	N
5	е	23	W	41	0
6	f	24	х	42	Р
7	g	25	У	43	Q
8	h	26	Z	44	R
9	i	27	Α	45	S
10	j	28	В	46	Т
11	k	29	С	47	U
12	I	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	0	33	G	51	Υ
16	р	34	Н	52	Z
17	q	35			
18	r	36	J		

APPROVAL

RALTRON		
DRAWN BY:	K. Jackson, March 27, 2014	
APPROVED BY:	K. Jackson, March 27, 2014	
REVISION:	A, Initial Release	
	B, CP, October 19, 2021	
	Updated to the current spec levels	
	C, AR, August 16, 2022	
	Updated to the current spec levels	

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