

CLOCK OSCILLATOR

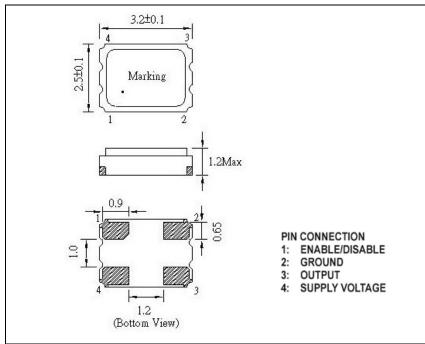
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COM1305-50.000-EXT-T-TR

■ ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	fo	Ta=25°C	50.000	MHz
Supply Voltage	Vcc	V _{CC} ±10%	3.3	VDC
Supply Current, max	Is	Ta=25°C	10	mA
Operating Temperature	Ta		-40 ~ +85	°C
Storage Temperature	T _(stg)	Absolute max	-55 ~ +125	°C
Frequency Stability	Δf/fo	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load and first year aging	±50	ppm
Outral Valtage	V_{OL}	Logic "0" Level	0.1 x Vcc	VDC
Output Voltage	V _{OH}	Logic "1" Level	0.9 x Vcc	VDC
Output Load		CMOS Output	15	pF
Enable / Disable Function	E/D	Pin 1: N.C. (Open) or High	Pin 3 – Oscillation (Enabled)	
Enable / Disable Function	E/D	Pin 1: Low	Pin 3 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% Vdd	45 ~ 55	%
Rise Time and Fall Time	tr / tf	@10% to 90% Vdd	5	ns
Start-up Time, max	ts	$V_{OUT} \ge 90\% V_{P-P}$	5	ms
Standby Current	I _(std)		10	μΑ
RMS Phase Jitter	J	Fj = 10kHz to 20MHz	1	ps

MECHANICAL SPECIFICATION



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

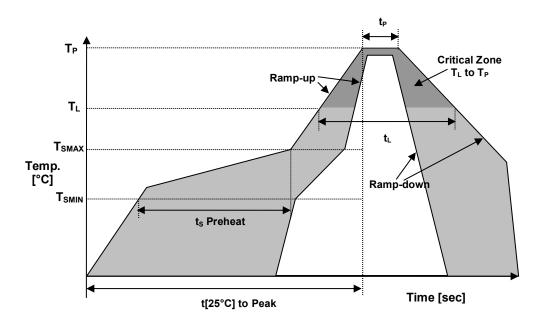


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REFLOW PROFILE



Reflow profile			
Temperature Min Preheat	T _{SMIN}	150°C	
Temperature Max Preheat	T _{SMAX}	200°C	
Time (T _{SMIN} to T _{SMAX})	ts	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∟	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

Rx50.00T •3BEyww

x - 1 or 2 digits as 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	M
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	T
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	I		
18	r	36	J		

APPROVAL

RALTRON		
DRAWN BY:	KJackson, March 12, 2014	
APPROVED BY:	KJackson, March 12, 2014	
REVISION:	A, Initial Release	
	B, CP, October18, 2018	
	Upgraded to the new spec level	
	C, Updated to current spec levels by	
	XLiu. June 5. 2020	

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