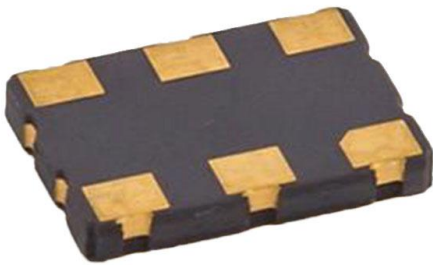


CP5032-250.000-2.5-25-X-T-TR Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	CP5032-250.000-2.5-25-X-T-TR-DG
Manufacturer	Raltron Electronics
Manufacturer Product Number	CP5032-250.000-2.5-25-X-T-TR
Description	XTAL OSC XO 250MHZ 2.5V LVPECL
Detailed Description	250 MHz XO (Standard) LVPECL Oscillator 2.5V Enable/Disable 6-SMD, No Lead



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CP5032-250.000-2.5-25-X-T-TR

Series:

CP5032

Base Resonator:

Crystal

Frequency:

250 MHz

Output:

LVPECL

Frequency Stability:

±25ppm

Operating Temperature:

-40°C ~ 85°C

Current - Supply (Max):

80mA

Mounting Type:

Surface Mount

Size / Dimension:

0.197" L x 0.126" W (5.00mm x 3.20mm)

Current - Supply (Disable) (Max):

-

Manufacturer:

Raltron Electronics

Product Status:

Active

Type:

XO (Standard)

Function:

Enable/Disable

Voltage - Supply:

2.5V

Absolute Pull Range (APR):

-

Spread Spectrum Bandwidth:

-

Ratings:

-

Package / Case:

6-SMD, No Lead

Height - Seated (Max):

0.051" (1.30mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



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LVPECL CLOCK OSCILLATOR

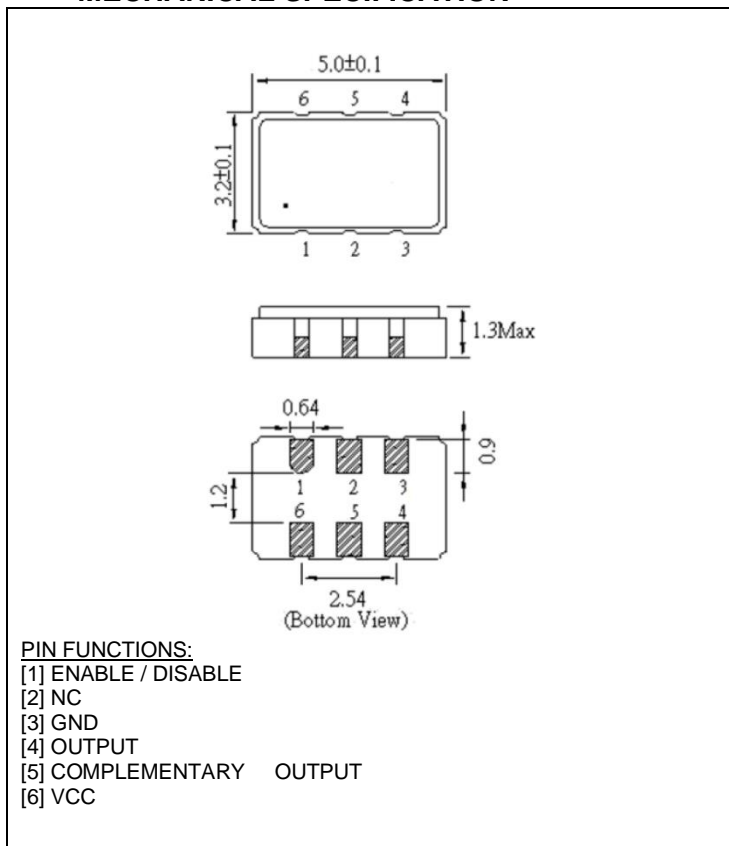
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CP5032-250.000-2.5-25-X-T-TR

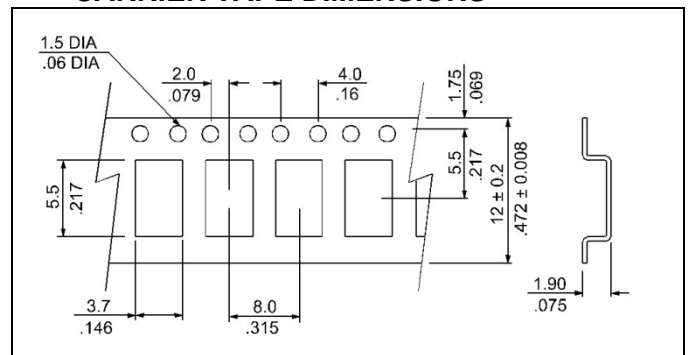
■ ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	f_o	$T_a=25^{\circ}\text{C}$	250.000	MHz
Supply Voltage	V_{CC}	$V_{CC} \pm 10\%$	2.5	VDC
Supply Current, max	I_s	$T_a=25^{\circ}\text{C}$	80	mA
Operating Temperature Range	T_a		-40 to +85	$^{\circ}\text{C}$
Storage Temperature Range	$T_{(stg)}$	Absolute max	-55 to +125	$^{\circ}\text{C}$
Output Logic Type			LVPECL	
Overall Freq. Stability, max.	$\Delta f/f_o$	Inclusive of 25°C Tolerance and Changes due to Operating Temperature	± 25	ppm
Output Voltage	V_{OL}	$V_{OL, \text{max}}$	$V_{CC} - 1.620$	VDC
	V_{OH}	$V_{OH, \text{min}}$	$V_{CC} - 1.025$	VDC
Output Load		Terminus to $V_{CC} - 2V$	50	Ω
Enable / Disable Function	E/D	Pin 1: N.C. (Open) or High ($0.7 \times V_{CC}$)	Pin 4 & 5 – Oscillation (Enabled)	
		Pin 1: Low ($0.3 \times V_{CC}$)	Pin 4 & 5 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% Vdd	45 ~ 55	%
Rise Time and Fall Time	t_r / t_f	@20% to 80% Vdd	1.0	ns
Jitter, RMS, typ / max	J	1σ , $12\text{kHz} < F_j < 20\text{MHz}$	2.0	ps
Start-up Time, max	T_s		5	ms

■ MECHANICAL SPECIFICATION



■ CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

■ PACKAGING

178 mm REEL DIAMETER
 12 mm TAPE WIDTH, 8 mm PITCH
 QUANTITY: 1000 PIECES PER REEL



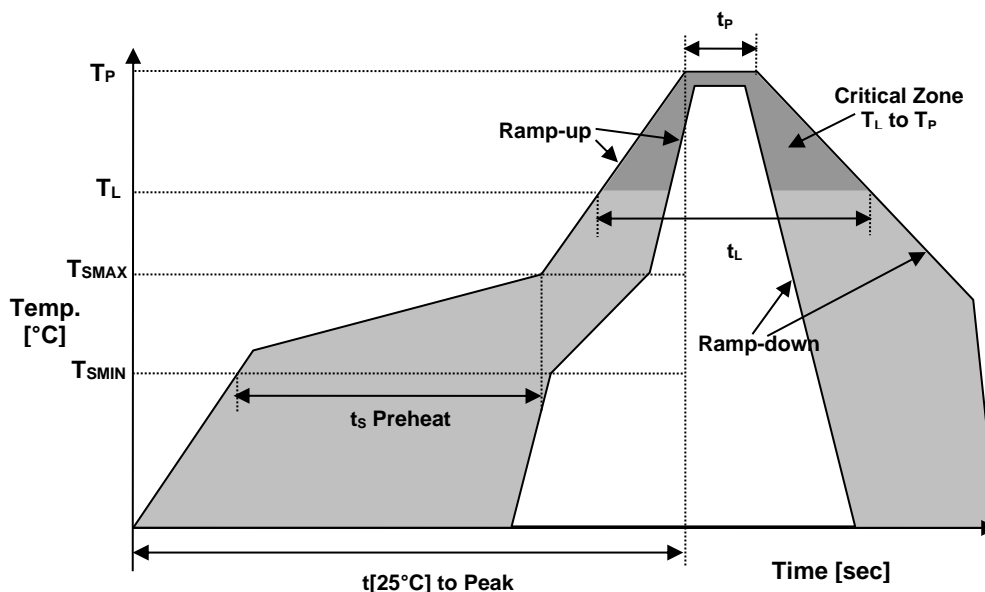
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LVPECL CLOCK OSCILLATOR

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CP5032-250.000-2.5-25-X-T-TR

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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LVPECL CLOCK OSCILLATOR

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CP5032-250.000-2.5-25-X-T-TR

MARKING

Rx250.0T

•2AEyw

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
2029	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		

APPROVAL

RALTRON	
DRAWN BY:	AR, January 17, 2019
APPROVED BY:	CP, January 17, 2019
REVISION:	A, Initial Release B, Updated to current spec levels by XLiu, September 21, 2022

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