SMD Crystal Oscillator - LVPECL

XO 0960

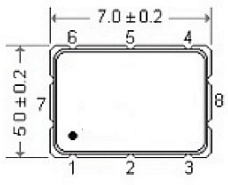
Features
- Ultra-Low Jitter
- LVPECL Output
- RoHS Compliant

Parameter	Specifications	
Frequency Range	150 MHz ~ 2100 MHz	
Supply Voltage, V_{dd}	2.5 V ± 10% (Code: 2) 3.3 V ± 10% (Code: 3)	
Current Consumption	120 mA (max.)	
Output Waveform	LVPECL	
Load	50 Ω into V_{dd}-2 V	
Output High Level	**Min.**	**Max.**
	V_{dd}-1.165 V	V_{dd}-0.8 V
Output Low Level	**Min.**	**Max.**
	V_{dd}-2.0 V	V_{dd}-1.55 V
Duty Cycle	50% ± 5%	
Rise/ Fall Time	0.5 ns (max.) [20% to 80% Waveform]	
Frequency Stability	Select from Table 1	
Operating Temperature Range (OTR)	Select from Table 1	
V Disable	0.2 V_{dd} (max.)	
V Enable	0.8 V_{dd} (min.)	
Enable Time	2.5 ms (max.)	
Disable Time	10 us (max.)	
Start up Time	5 ms (typ.); 10 ms (max.)	
RMS Phase Jitter	155 fs (typ.) [12 KHz ~ 20 MHz]	
Aging @ 25°C	± 3 ppm (max.) for First Year; ± 2 ppm (max.) per Year, thereafter	
Storage Temperature Range	-55°C to +150°C	

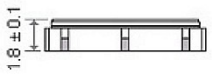
Mechanical Specifications

Outline

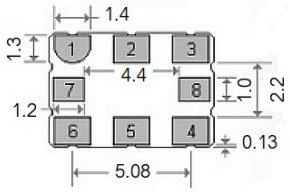
Top View



Front View



Bottom View



▲ All dimensions are in mm. Tolerance is ±0.1 mm, unless otherwise specified.

Pad Configuration

Pad	Description
1	Output Enable
2	No Connection
3	Ground
4	Output
5	Complimentary Output
6	Supply Voltage
7	No Connection
8	No Connection

Table 1

OTR Codes	Stability Codes		F	G	M
	Frequency Stability		±20 ppm	±25 ppm	±50 ppm
E	Operating Temperature Range	-10°C to +70°C			
C		-20°C to +70°C			
I		-40°C to +85°C			

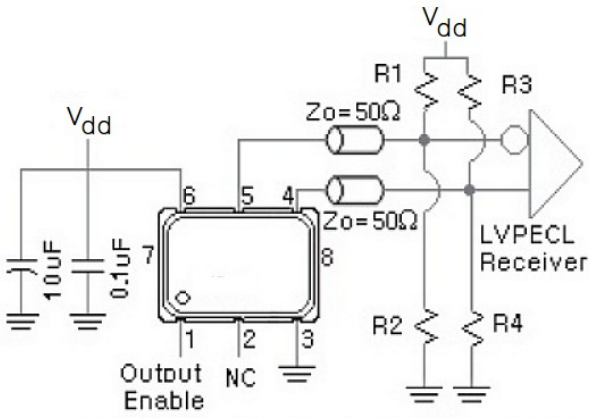
Denotes Available Denotes not Available

Andhra Electronics Pvt. Ltd.

Plot No.: 34 & 35, IDA,
Kakinada-533 005
Andhra Pradesh, India
URL: www.andhraelec.com

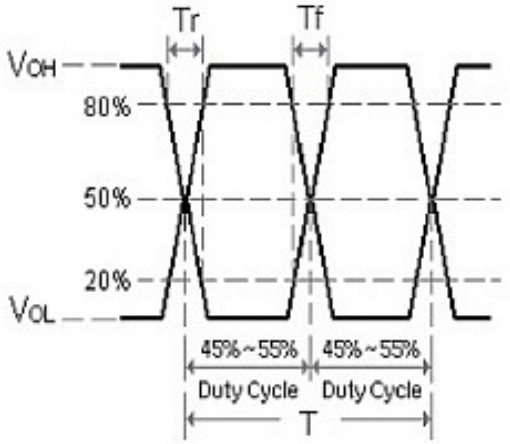
Phone: +91 884 234 2203
Fax: +91 884 234 1145
e-mail: info@andhraelec.com

TEST CIRCUIT



V_{dd} = 3,3 V : R1 = R3 = 127 Ω ; R2 = R4 = 82,5 Ω
V_{dd} = 2,5 V : R1 = R3 = 250 Ω ; R2 = R4 = 62,5 Ω

Output Waveform



Ordering Information

Example

XO 0960	I	G	3	P	400M000000

- Series
- Freq.: 400 MHz
- OTR: -40°C to +85°C
- Output: LVPECL
- Stability: ±25 ppm
- Supply Voltage: +3.3 V

Specifications subject to change without prior notice

Rev. Date: 24th July 2021

Note: Not all combination of options are available. Other specifications may be available upon request.

Andhra Electronics Pvt. Ltd.
Plot No.: 34 & 35, IDA,
Kakinada-533 005
Andhra Pradesh, India
URL: www.andhraelec.com

Phone: +91 884 234 2203
Fax: +91 884 234 1145
e-mail: info@andhraelec.com