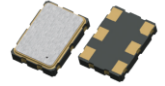


## Features

- Small size (7.0\*5.0mm)
- SMD
- Low Jitter

## Applications

- Auto Electronics
- Industrial Special Device
- Smart Applications
- Consumer Electronics
- Communication Device



## BV0507E\_LVPECL Series

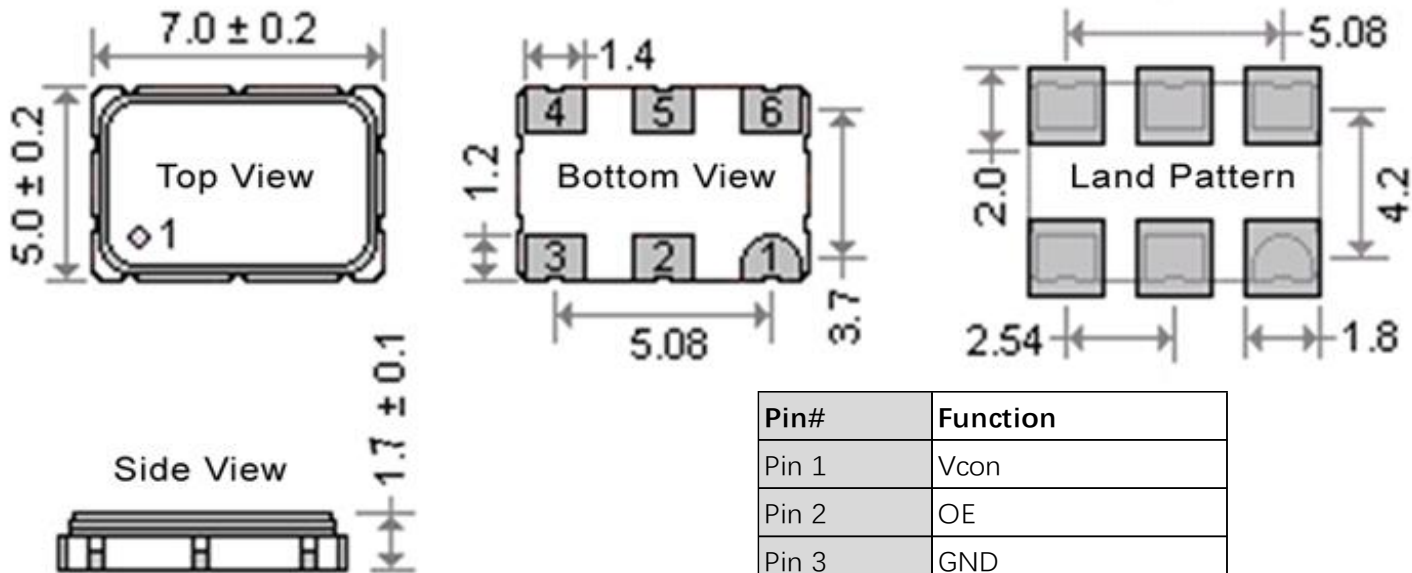
Parameter	Value	Unit	Conditions				
Supply Voltage	+ 2.5 or +3.3	V	± 5%				
Output Type	LVPECL						
Available Frequency Range	10 ~ 1500	MHz					
Load	50Ω into VDD - 2V or Thevenin equivalent						
Current Consumption(Max.)	82	mA	VDD = +3.3V @1350MHz				
Current with Output Disable	16 typ.	mA					
Output Logic " High " , " 1 "	Vdd-1.03 min. Vdd-0.6 max.	V					
Output Logic " Low " , " 0 "	Vdd-1.85 min. Vdd-1.6 max.	V					
Rise Time ( Tr ) / Fall Time ( Tf )	0.2	nsec	typ.				
	0.5	nsec	max				
	20%~80% waveform	nsec					
Frequency Stability over Operating Temperature Range	±25 / ±50 / ±100	ppm	-20°C to +70°C				
	±25 / ±50 / ±100	ppm	-40°C to +85°C				
Current with Output Disable	16 ( typ.)	mA					
Duty Cycle	50 % ± 5%	-					
Start -up Time	10	ms	max				
Storage Temperature	- 55°C~+125°C	°C					
Aging	± 2 ppm ( max.) first year ; ± 10 ppm ( max.) over 10 years	ppm	at Ta=+25°C				
Output Enable	200	nsec	max				
Disable Time	50	nsec	max				
Vcontrol Range	+ 0.3 ~ +3.0	V	VDD = +3.3 V ; Vcon Center = +1.65V				
Frequency Pulling Range	± 80 ( min.)	ppm					
Linearity	± 5% ( typ.) ±10% ( max.)	-					
Input Impedance	1	MΩ	typ				
Bandwidth	10	KHz	min				
Transfer Function	Positive Transfer	-					
OE Control on Pad 2 (Open connection prohibit)	70% of VDD (min.) to enable output.	-					
	30% of VDD (max.) to disable output.	-					
Output Enable/Disable Time	200 ns max. / 50 ns max.	-					
RMS Jitter	1.2ps typ.	ps	12KHZ~ 20MHZ				
Phase Noise [ dBc / Hz (typ.)]	Offset	10Hz	100Hz	1KHz	10KHz	100KHz	
	153.449 MHz	-66	-100	-114	-119	-121	
	622.08 MHz	-48	-85	-101	-102	-103	

## Reliability

Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC

## Outline Dimension & Pin Connections

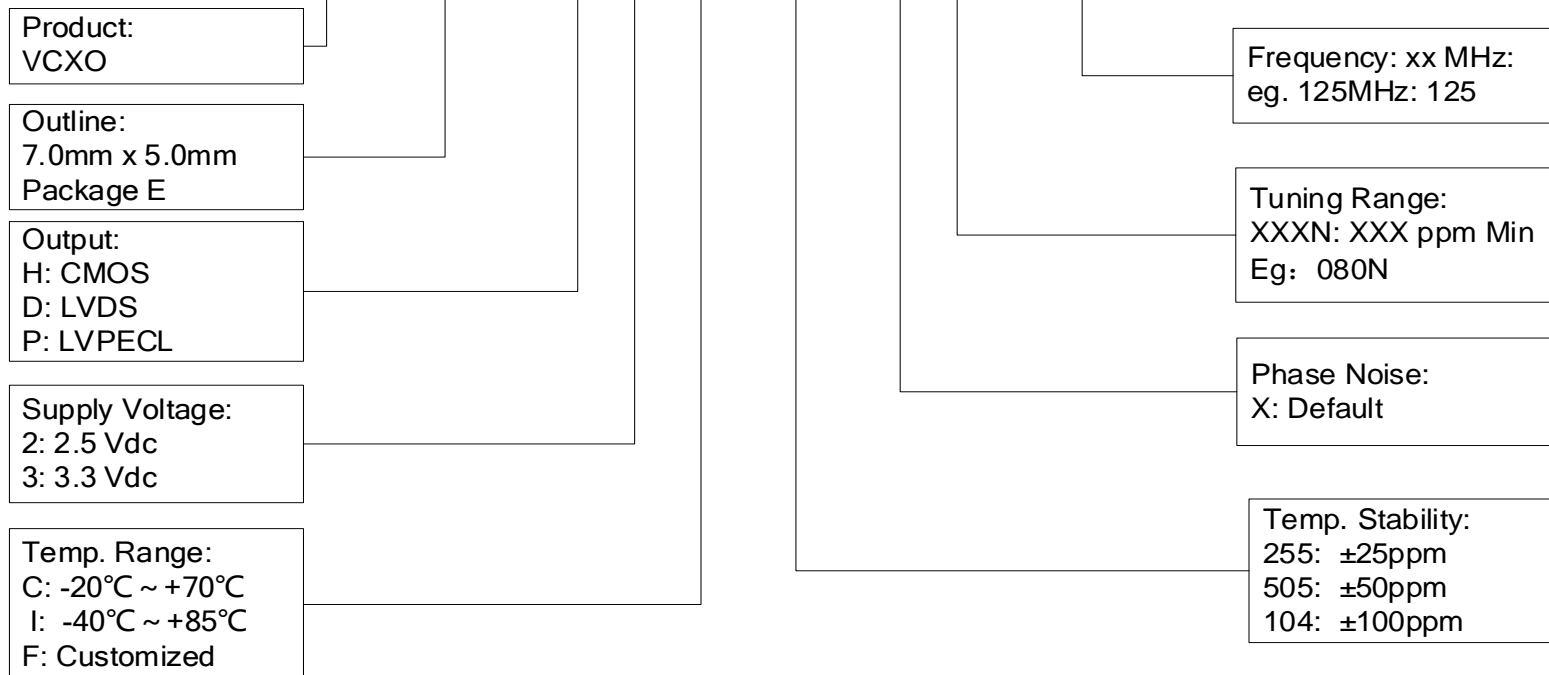
Unit: mm



Pin#	Function
Pin 1	Vcon
Pin 2	OE
Pin 3	GND
Pin 4	Output
Pin 5	Comp. Output/NC
Pin 6	Vcc

## Ordering Guide

BV 0507E X X X XXX X X XX.XX



**Example: BV0507EP3I505X080N153.449**

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