



# XO-8000 Serie



1. Specification	
<b>Type:</b>	<b>XO-8XYZ</b>
Frequency range:	2.0 ... 800.0 MHz
Supply voltage $V_S$ (nominal values $\pm 5\%$ ): +5.0 V $\pm 5\%$ : +3.3 V $\pm 5\%$ :	<b>X</b> 1 2
Initial frequency tolerance @ $T_A = +25\text{ }^\circ\text{C}$ , 24 h after reflow ( $T_{\text{peak}} = +260\text{ }^\circ\text{C}$ for 10 sec max):	$\leq \pm 10$ ppm
Temperature range options: -10 $^\circ\text{C}$ to +60 $^\circ\text{C}$ : -20 $^\circ\text{C}$ to +70 $^\circ\text{C}$ : -40 $^\circ\text{C}$ to +85 $^\circ\text{C}$ :	<b>Y</b> 1 2 3
Frequency stability options: $\pm 10$ ppm (for Temp.range options 1, 2): $\pm 15$ ppm: $\pm 20$ ppm:	<b>Z</b> 1 2 3
Frequency stability vs. supply voltage changes $V_S \pm 5\%$ : vs. load changes $\pm 10\%$ :	$\leq \pm 3.0$ ppm $\leq \pm 1.0$ ppm
Aging @ +25 $^\circ\text{C}$ : $\leq \pm 2$ ppm /1 <sup>st</sup> year $\leq \pm 5$ ppm within 15 years	<b>S</b> <b>H</b>

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1		28.01.2011	Zupan	
ED	Description	Date	Name	



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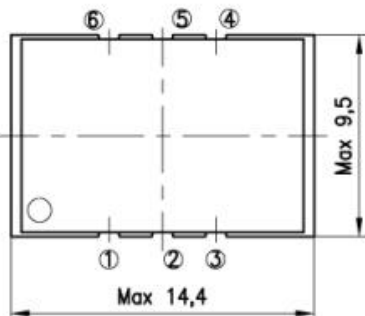
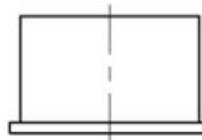
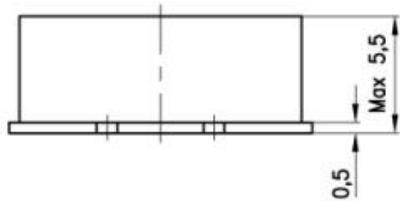
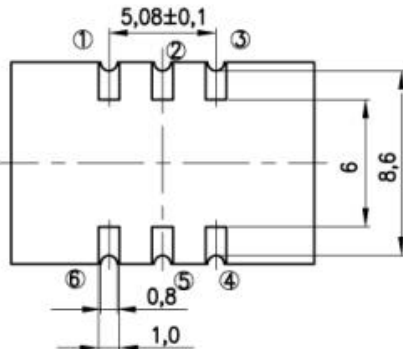


1. Specification continued	
Output signal Option <b>H</b> : (LV)HCMOS ( $\leq 155.52\text{MHz}$ ): high level : low level : load : duty cycle: rise / fall time (20 % to 80 %):	low $\geq 90\% V_S$ high $\leq 10\% V_S$ 1 kOhm // 15 pF 40 / 60 % < 5 ns
Current consumption for (LV)HCMOS:	< 30 mA
Output signal Option <b>P</b> : LVPECL ( $\leq 800\text{MHz}$ ): level: load : duty cycle : rise / fall time (20 % to 80 %):	High $\geq 2.275\text{ V}$ , Low $\leq 1.68\text{ V}$ 50 Ohm 45 / 55% < 1 ns
Current consumption for LVPECL:	< 100 mA
Output signal Option <b>L</b> : LVDS ( $\leq 250\text{MHz}$ ): level: load: duty cycle: rise / fall time (20 % to 80 %):	$247\text{ mV} \leq V_{OD} \leq 454\text{ mV}$ 100 Ohm sym. 45% / 55% < 1 ns
Current consumption for LVDS:	$\leq 45\text{ mA}$
Output signal Option <b>S</b> : Sinewave ( $\leq 800\text{MHz}$ ): Level: Load:	$\geq 0\text{ dBm}$ 50 Ohm
Current consumption for Sinewave:	$\leq 40\text{ mA}$
Harmonics (for sinewave output):	$\leq -30\text{ dBc}$
Subharmonics ( $f > 200\text{MHz}$ ) :	$\leq -40\text{ dBc}$
Storage temperature range:	-55 to +105 °C
2. Marking	
1. ww KVG yy 3. Specification / Part Number 2. Frequency	
3. Environmental conditions	
According to KVG Product Qualification Procedure AA-QM-200	

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## 4. Case

Case style: BF188-5.5C for LVPECL, LVDS and (LV)HCMOS



### 1.Pin configuration for LVPECL and LVDS:

1. N.C.
2. Output enable/disable
3. Ground case
4. RF-output
5. Complementary RF-output
6. Supply voltage  $V_S$

### 1.Pin configuration for (LV)HCMOS:

1. N.C.
2. Output enable/disable
3. Ground case
4. RF-output
5. N.C.
6. Supply voltage  $V_S$

### TriState Function LVPECL:

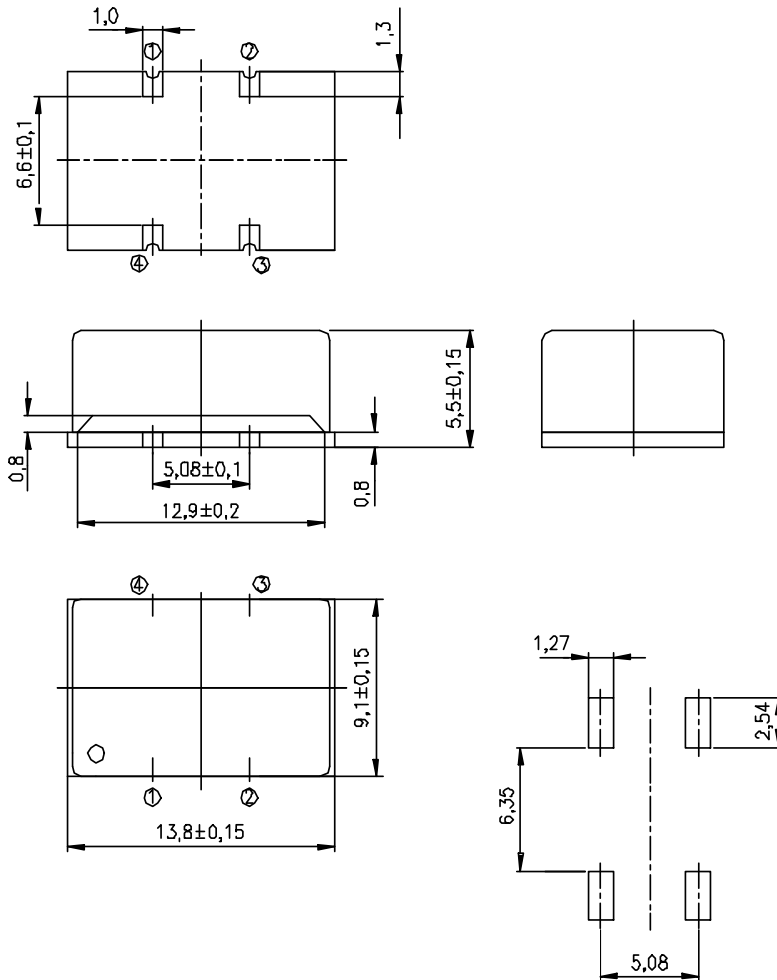
Pin 2 Low or N.C. : Enabel  
Pin 2 High : Disable

### TriState Function LVDS and (LV)HCMOS:

Pin 2 N.C. High or N.C. : Enabel  
Pin 2 Low : Disable

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Case style: BF157-5.5B for sinewave output



## 1.Pin configuration

1. N.C.
2. Ground case
3. RF-output
4. Supply voltage  $V_s$

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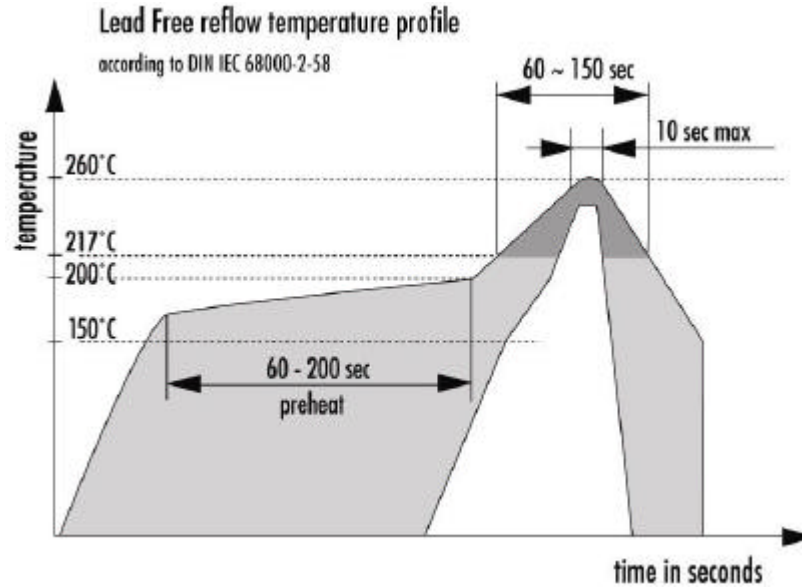


ROHS-Compliant Product

# XO-8000 Serie



## 5. Reflow Soldering Profile



## 6. Ordering Information

Package Code	Supply Voltage	Temp. Range	Frequ. Stability	Aging	Output Signal	RoHS compl.	Nominal Frequency
BF188-5.5C	3.3 V	-20/+70 °C	± 20 ppm	± 2 ppm	LVDS		125.000
XO-8xxx	2	2	3	S	L	-LF	- 125.000 MHz

Example: XO-8223SL-LF-125.000 MHz

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