

# VF261

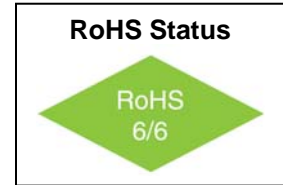
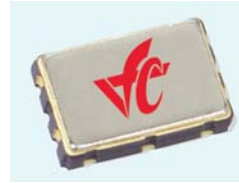
## XO Low Jitter

### 5x7mm SMD, PECL / LVPECL



#### Features

- 25MHz to 320MHz Frequency Range
- Tight duty cycle
- <1ps jitter over 12KHz ~ 20MHz



#### Applications

- Optical Networking, SONET / SDH
- 10 Gigabit Ethernet
- Broadband Access

\*Not recommended for new designs – see [VFXO401](#)\*

#### Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		15		300	MHz	
Frequency Stability	$\Delta F/F$	Over all conditions of :- Operating Temperature; Supply Voltage; 10 Years Aging; shock & vibration			$\pm 20$ $\pm 25$ $\pm 50$ $\pm 100$	ppm	Order Code S Order Code A Order Code B standard
Operating Temperature	T		0° -40°		+70° +85°	°C	
Output			PECL LVPECL				
Supply Voltage	V <sub>cc</sub>	PECL LVPECL	4.75 3.15	5.00 3.30	5.25 3.45	V	Standard Order Code L
Input Current	I <sub>cc</sub>	50 Ohm Load			60	mA	



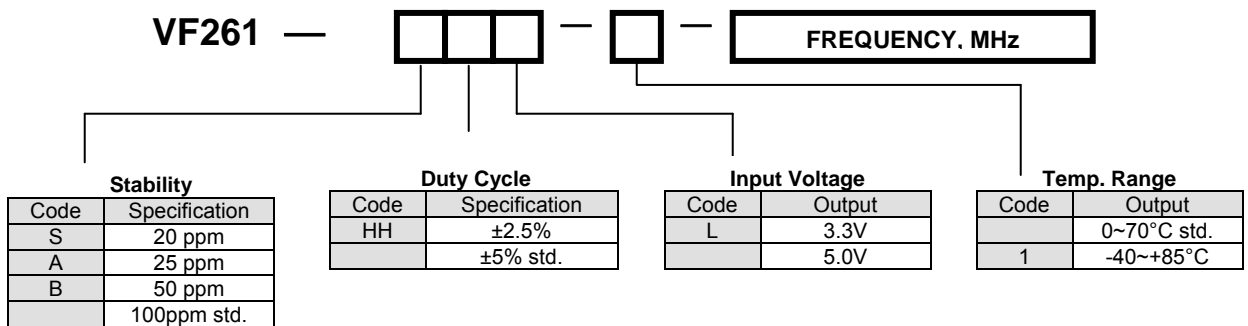
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**Electrical Specifications**

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
<b>Load</b>	50 Ohm to Vcc-2V or Thevenin Equivalent Bias Required						
<b>Duty Cycle</b>			47.5 45	50 50	52.5 55	%	<i>Order Code HH Standard</i>
<b>Rise / Fall Time</b>	Tr/Tf	20% to 80%			1.5	ns	
<b>Logic "1" Level</b>	Voh	Vcc = 5.0V Vcc = 3.3V	4.04 2.59		4.19 2.74	V	
<b>Logic "0" Level</b>	Vol	Vcc = 5.0V Vcc = 3.3V	3.15 1.45		3.25 1.55	V	
<b>Start up time</b>				2	10	ms	
<b>Jitter 12KHz~20MHz</b>	1σ				0.7	ps	

**How to Order**



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### Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Break Down Voltage	V <sub>cc</sub>		-0.5		4.6	V	
Storage Temperature	T <sub>s</sub>		-55		+125°	°C	
Junction Temperature	T <sub>j</sub>				+125°	°C	

### Environmental and Mechanical

Parameter	Specification
Mechanical Shock	Per MIL-STD-202, Method 213, Condition E
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Vibration	Per MIL-STD-883, Method 2007, Condition A
Soldering Conditions	260°C for 10s max
Hermetic Seal	Leak rate less than 5x10 <sup>-8</sup> atm.cc/s of helium

Pin #	Connection
1	N/C
2	N/C
3	Case GND
4	Output
5	Output
6	V <sub>cc</sub>

