

# VF266

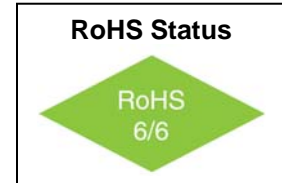
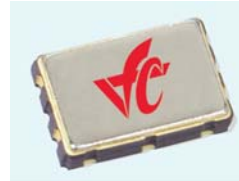
## XO Low Jitter

### 5x7mm SMD, LVPECL



#### Features

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



#### 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		25		320	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			LVPECL				
Supply Voltage	Vcc	LVPECL	3.15	3.30	3.45	V	
Input Current	Icc	50 Ohm Load		55	88	mA	



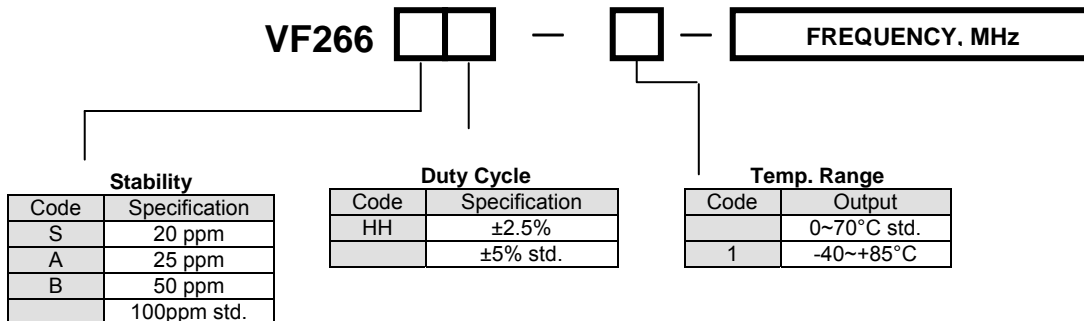
**VF266**  
**XO Low Jitter**  
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**Electrical Specifications**

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	%	Order Code HH Standard
<b>Rise / Fall Time</b>	Tr/Tf	20% to 80%		0.5	0.8	ns	
<b>Logic "1" Level</b>	Voh	Vcc = 3.3V	2.275	2.35	2.42	V	
<b>Logic "0" Level</b>	Vol	Vcc = 3.3V	1.49	1.60	1.68	V	
<b>Start up time</b>				2	10	ms	
<b>Jitter 12KHz~20MHz</b>	1σ				0.7	ps	
<b>Enable "1"</b>	V <sub>IH</sub>	Outputs Active	0.7Vcc	-	-	V	Pin 1 may float
<b>Disable "0"</b>	V <sub>IL</sub>	Outputs Disabled	-	-	0.3Vcc	V	

**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	OE
2	N/C
3	Case GND
4	Output
5	Output
6	V <sub>cc</sub>

