

VF261

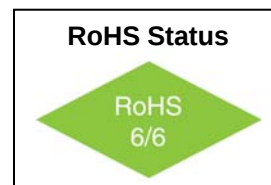
XO Low Jitter

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 [VF XO401](#)

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			± 20 ± 25 ± 50 ± 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 _{cc}	PECL LVPECL	4.75 3.15	5.00 3.30	5.25 3.45	V	Standard Order Code L
Input Current	I _{cc}	50 Ohm Load			60	mA	



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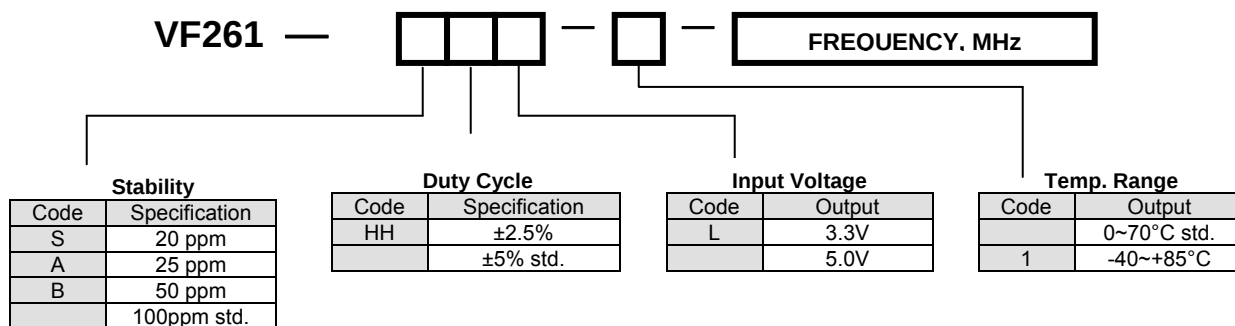
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Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Load	50 Ohm to Vcc-2V or Thevenin Equivalent Bias Required						
Duty Cycle			47.5 45	50 50	52.5 55	%	Order Code HH Standard
Rise / Fall Time	Tr/Tf	20% to 80%			1.5	ns	
Logic "1" Level	Voh	Vcc = 5.0V Vcc = 3.3V	4.04 2.59		4.19 2.74	V	
Logic "0" Level	Vol	Vcc = 5.0V Vcc = 3.3V	3.15 1.45		3.25 1.55	V	
Start up time				2	10	ms	
Jitter 12KHz~20MHz	1 σ				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 _{cc}		-0.5		4.6	V	
Storage Temperature	T _s		-55		+125°	°C	
Junction Temperature	T _j				+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 ⁻⁸ atm.cc/s of helium

Pin #	Connection
1	N/C
2	N/C
3	Case GND
4	Output
5	Output
6	V _{cc}

