

VF265

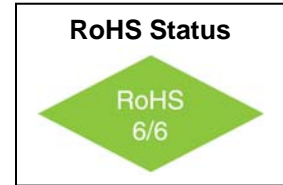
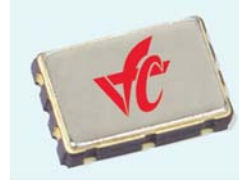
XO Low Jitter

5x7mm SMD, LVPECL



Features

- 25MHz to 320MHz Frequency Range
- Tight duty cycle
- <1ps jitter over 12KHz ~ 20MHz
- Output Enable on Pin 2



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			± 20 ± 25 ± 50 ± 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	



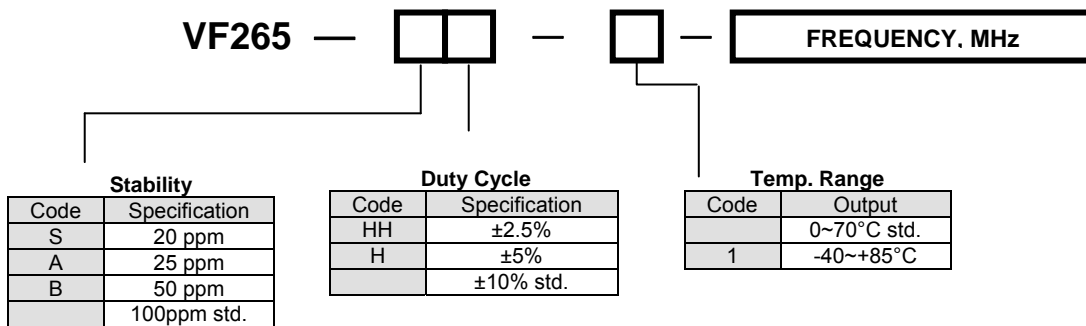
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Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Load	50 Ohm to Vcc-2V or Thevenin Equivalent Bias Required						
Duty Cycle			47.5 45 40	50 50 50	52.5 55 60	%	Order Code <i>HH</i> Order Code <i>H</i> Standard
Rise / Fall Time	Tr/Tf	20% to 80%		0.5	0.8	ns	
Logic "1" Level	Voh	Vcc = 3.3V	2.275	2.35	2.42	V	
Logic "0" Level	Vol	Vcc = 3.3V	1.49	1.60	1.68	V	
Start up time				2	10	ms	
Jitter 12KHz~20MHz	1σ				0.7	ps	
Enable "1"	V _{IH}	Outputs Active	0.7Vcc	-	-	V	Pin 1 may float
Disable "0"	V _{IL}	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 _{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	OE
3	Case GND
4	Output
5	Output
6	V _{cc}

