

VF267

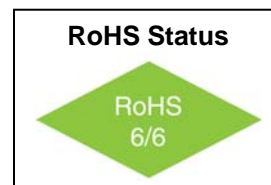
XO Low Jitter

5x7mm SMD, 2.5V LVPECL



Features

- 25MHz to 320MHz Frequency Range
- 2.5V Supply Voltage
- 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 | | | ± 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 | 2.375 | 2.50 | 2.625 | V | |
| Input Current | Icc | 50 Ohm Load | | 55 | 88 | mA | |



VF267

XO Low Jitter

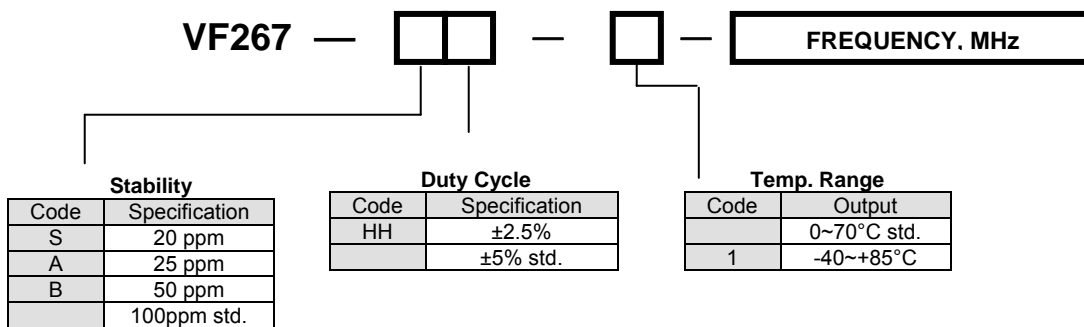
5x7mm SMD, 2.5V LVPECL



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% | | 0.5 | 0.8 | ns | |
| Logic "1" Level | Voh | Vcc = 2.5V | 1.425 | 1.55 | 1.76 | V | |
| Logic "0" Level | Vol | Vcc = 2.5V | 0.69 | 0.80 | 0.88 | 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



VF267

XO Low Jitter

5x7mm SMD, 2.5V LVPECL



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 | OE |
| 2 | N/C |
| 3 | Case GND |
| 4 | Output |
| 5 | Output |
| 6 | V _{cc} |

