

PV-U Type Crystal Oscillator

FASTXO 5.0 x 3.2 mm SMD XO

Frequency up to 200MHz

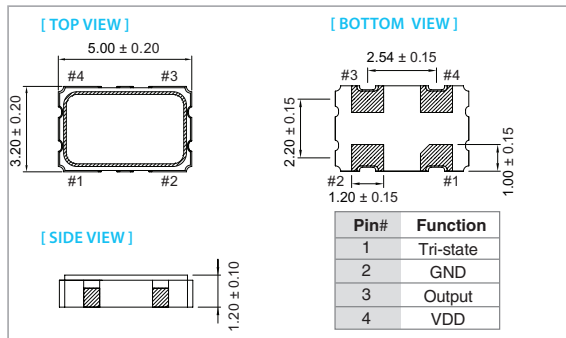
FEATURE

- Typical 5.0 x 3.2 x 1.2 mm ceramic SMD package
- Operation supply voltage: 1.8V, 2.5V and 3.3V
- FASTXO series, Fast delivery at any frequency
- Tri-State Enable/Disable
- Frequency Stability ± 25 ppm over -40°C to 105°C
- Pb-free/RoHS compliant

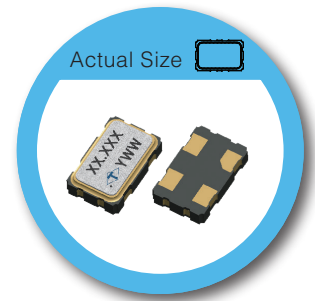
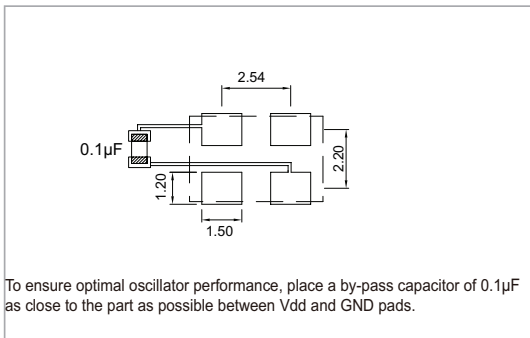
TYPICAL APPLICATION

- Mobile Phone
- WLAN, Wireless, Fiber/10G-bit Ethernet
- Notebook, PDA, DSC

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



RoHS Compliant

ELECTRICAL SPECIFICATION

| Parameter | 3.3V | | 2.5V | | 1.8V | | Unit | |
|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------|
| | Min. | Max. | Min. | Max. | Min. | Max. | | |
| Supply Voltage Variation | V _{DD} -5% | V _{DD} +5% | V _{DD} -5% | V _{DD} +5% | V _{DD} -5% | V _{DD} +5% | V | |
| Frequency Range | 1 | 200 | 1 | 200 | 1 | 125 | MHz | |
| Supply Current (@15pf Loading) | - | 35 | - | 30 | - | 20 | mA | |
| Output Level | Output High | 90%V _{DD} | - | 90%V _{DD} | - | 90%V _{DD} | V | |
| | Output Low | - | 10%V _{DD} | - | 10%V _{DD} | - | 10%V _{DD} | V |
| Transition Time | Rise Time / Fall Time | - | 2 | - | 2 | - | 3 | nSec |
| | | 45 | 55 | 45 | 55 | 45 | 55 | % |
| Duty Cycle | | 45 | 55 | 45 | 55 | 45 | 55 | % |
| Startup Time | | - | 8 | - | 8 | - | 8 | mSec |
| Tri-State | Output Enable | 0.7 x V _{DD} | - | 0.7 x V _{DD} | - | 0.7 x V _{DD} | - | V |
| | Output Disable | - | 0.3 x V _{DD} | - | 0.3 x V _{DD} | - | 0.3 x V _{DD} | V |
| Stand by Current (@PD Mode) | | - | 400 | - | 400 | - | 400 | uA |
| Stand by Current (@OE Mode) | | - | 20 | - | 20 | - | 20 | mA |
| Output Loading | | 15 | 15 | 15 | 15 | 15 | pf | |
| RMS Phase Jitter (12KHz to 20MHz) | | - | 2 | - | 2 | - | 2 | pSec |
| Aging (@ 25°C, First Year) | | - | ±3 | - | ±3 | - | ±3 | ppm |
| Storage Temp. Range | | -50 | +125 | -50 | +125 | -50 | +125 | °C |

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
 + Transition times are measured between 10% and 90% of V_{DD}, with an output load of 15pF.

FREQ. STABILITY vs. TEMP. RANGE

| Temp. (°C) | ppm | ±15 | ±20 | ±25 | ±50 |
|------------|-----|-----|-----|-----|-----|
| -20~+70 | | △ | ○ | ○ | ○ |
| -40~+85 | | × | △ | ○ | ○ |
| -40~+105 | | × | △ | ○ | ○ |

*O: Available △: Conditional X: Not available
 *Inclusive of calibration @ 25°C, operating temperature range, i
 Voltage variation, load variation, aging (1st year), shock, and vibratic

Note: not all combination of options are available. Other specifications may be available upon request.