

**3.3V CMOS Low-Jitter 27 MHz MPEG4 XO**

**FNSURV027**



7.0 x 5.0mm Ceramic SMD

**ASSP XO™ for Security**



**Product Features**

- Very low Pk to Pk jitter - 50ps Max
- Low output current - 10mA Max
- Low power standby mode
- RoHS Compliant

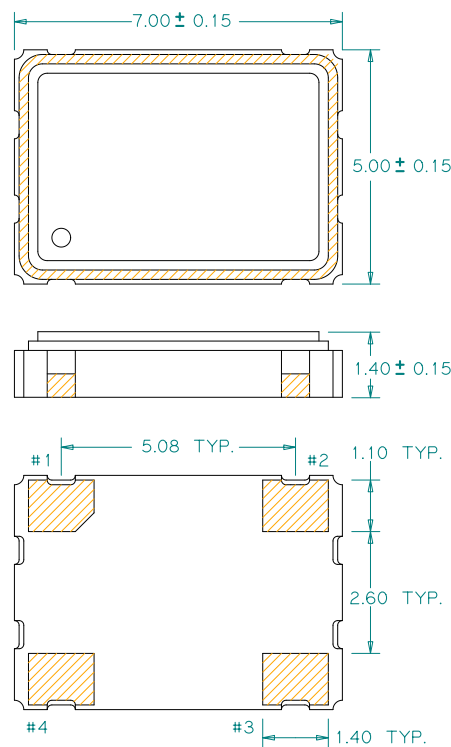
**Product Description**

This is an enhanced 3.3V, 27MHz crystal clock oscillator with superb jitter and low operating current providing a clock reference for MPEG4 video decoding applications.

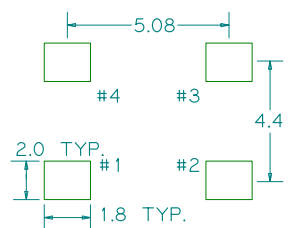
**Applications**

- IP Camera
- Video Surveillance Equipment
- Video Surveillance Add-in card

**Package:** (Scale: none, Dimensions are in mm)



Recommended Land Pattern:



**Pin Functions:**

| Pin | Function        |
|-----|-----------------|
| 1   | OE Function     |
| 2   | Ground          |
| 3   | Clock Output    |
| 4   | V <sub>DD</sub> |

\*Extended high frequency power decoupling is recommended (see test circuit for minimum recommendation). To ensure optimal performance, do not route RF traces beneath the package.

**Part Ordering Information:**  
**FNSURV027**

### Electrical Performance

| Parameter                       | Min.                | Typ. | Max.                | Units | Notes                        |
|---------------------------------|---------------------|------|---------------------|-------|------------------------------|
| Output Frequency                |                     | 27   |                     | MHz   |                              |
| Supply Voltage V <sub>DD</sub>  | 2.97                | 3.3  | 3.63                | V     |                              |
| Supply Current, Output Enabled  |                     |      | 10                  | mA    |                              |
| Supply Current, Output Disabled |                     |      | 10                  | μA    |                              |
| Frequency Stability             |                     |      | ±30                 | ppm   | See Note 1 below             |
| Operating Temperature Range     | -20                 |      | +70                 | °C    |                              |
| Output Logic 0, V <sub>OL</sub> |                     |      | 10% V <sub>DD</sub> | V     |                              |
| Output Logic 1, V <sub>OH</sub> | 90% V <sub>DD</sub> |      |                     | V     |                              |
| Output Load                     |                     |      | 15                  | pF    |                              |
| Duty Cycle                      | 45                  |      | 55                  | %     | Measured 50% V <sub>DD</sub> |
| Rise and Fall Time              |                     |      | 5                   | ns    | Measured 20/80% of waveform  |
| Jitter, pk-pk                   |                     |      | 50                  | ps    | 100.000 random periods       |

#### Notes:

- Stability includes all combinations of operating temperature, load changes, rated input (supply) voltage changes, initial calibration tolerance (25°C), aging (1 year at 25°C average effective ambient temperature), shock and vibration.
- For specifications other than those listed, please contact sales.

### Output Enable / Disable Function

| Parameter   | Min.                | Typ. | Max.                | Units | Notes          |
|---|---------------------|------|---------------------|-------|----------------|
| Input Voltage (pin 1), Output Enable                      | 0.7 V <sub>DD</sub> |      |                     | V     | or open        |
| Input Voltage (pin 1), Output Disable (low power standby) |                     |      | 0.3 V <sub>DD</sub> | V     | Output is Hi-Z |
| Internal Pullup Resistance                                | 30                  |      |                     | kΩ    |                |
| Output Disable Delay                                      |                     |      | 50                  | ns    |                |
| Output Enable Delay                                       |                     |      | 2                   | ms    |                |

### Absolute Maximum Ratings

| Parameter           | Min. | Typ. | Max. | Units | Notes |
|---------------------|------|------|------|-------|-------|
| Storage Temperature | -55  |      | +125 | °C    |       |

For the latest product information visit: <http://www.pericom.com/products/crystals-and-crystal-oscillators/assp-xo/?part=FNSURV027>

For test circuit go to: [http://www.pericom.com/pdf/sre/tc\\_hcm05.pdf](http://www.pericom.com/pdf/sre/tc_hcm05.pdf)

For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

For tape and reel information go to: [http://www.pericom.com/pdf/sre/tr\\_7050\\_xo.pdf](http://www.pericom.com/pdf/sre/tr_7050_xo.pdf)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Standard Clock Oscillators](#) category:*

*Click to view products by [Diodes Incorporated](#) manufacturer:*

Other Similar products are found below :

[601252](#) [F335-12](#) [F335-25](#) [F535L-33.333](#) [F535L-50](#) [ASV-20.000MHZ-LR-T](#) [ECS-2018-160-BN-TR](#) [EL13C7-H2F-125.00M](#) [MXO45HS-2C-66.6666MHZ](#) [SiT8209AI-32-33E-125.000000](#) [SM4420TEV-40.0M-T1K](#) [F335-24](#) [F335-40](#) [F535L-10](#) [F535L-16](#) [F535L-24](#) [F535L-27](#) [F535L-48](#) [PE7744DW-100.0M](#) [CSX-750FCC14745600T](#) [ASF1-3.686MHZ-N-K-S](#) [XO57CTECNA3M6864](#) [ECS-2100A-147.4](#) [601251](#) [EP16E7E2H26.000MTR](#) [SIT8918AA-11-33S-16.000000G](#) [XO3003](#) [9120AC-2D2-33E212.500000](#) [9102AI-243N25E100.00000](#) [8208AC-82-18E-25.00000](#) [ASDK2-32.768KHZ-LR-T3](#) [8008AI-72-XXE-24.545454E](#) [8004AC-13-33E-133.33000X](#) [AS-4.9152-16-SMD-TR](#) [ASFL1-48.000MHZ-LC-T](#) [SIT8920AM-31-33E-25.0000](#) [DSC1028DI2-019.2000](#) [9121AC-2C3-25E100.00000](#) [9102AI-233N33E100.00000X](#) [9102AI-233N25E200.00000](#) [9102AI-232H25S125.00000](#) [9102AI-133N25E200.00000](#) [9102AC-283N25E200.00000](#) [9001AC-33-33E1-30.000](#) [3921AI-2CF-33NZ125.000000](#) [5730-1SF](#) [PXA000010](#) [SIT1602BC-83-33E-10.000000Y](#) [8003AI-12-33S-40.00000Y](#) [1602BI-13-33S-19.200000E](#)