

F Type XO

ROHS Compliant Standard



FEATURE

- 20.5×12.8×5.0mm Standard package.
- Compatible with 14-pin dual in line.
- HCMOS circuit TTL/CMOS compatible.
- Hermetically sealed metal case and high reliability.
- Case ground for minimizing RF radiation.
- Tight symmetry (45 to 55%) available.
- High frequency range, 0.001 MHz~156MHz.

Numbering system



| Supply Voltage & Pin Form | | |
|---------------------------|--------------|-----------|
| | Through Hole | Gull Wing |
| 5V | T | G |
| 3.3V | E | F |

| Output Logic and symmetry | | | | |
|---------------------------|-----|----------|-----------|-----------|
| | TTL | TTL 50pF | CMOS 15pF | CMOS 50pF |
| 50±5% | A | E | J | F |
| 50±10% | B | R | K | G |

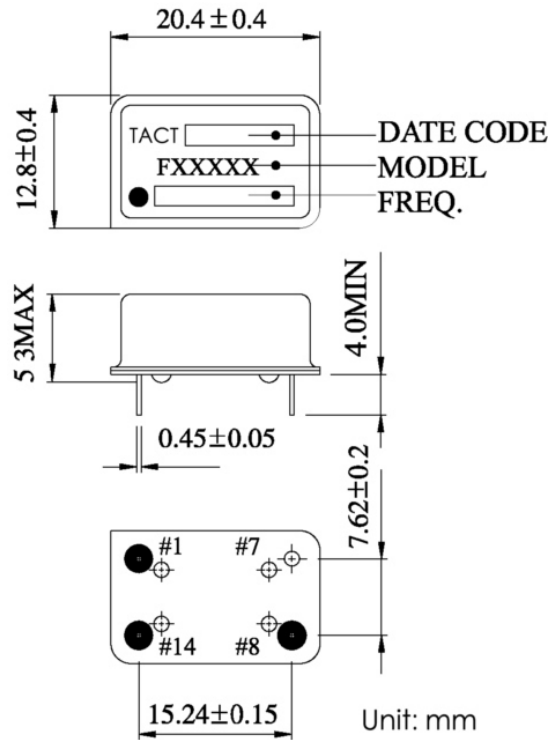
| Tri-State Function | |
|--------------------|---|
| F: | Fixed-Frequency Without Tri-State |
| T: | Fixed-Frequency With Tri-State |
| B: | Low Frequency Without Tri-State (1KHz~1MHz, 5.0 Only) |

| Frequency Stability | |
|---------------------|---------|
| D: | ±25ppm |
| G: | ±50ppm |
| H: | ±100ppm |

| Temperature Range | |
|-------------------|----------------|
| B: | -20°C to +70°C |
| D: | -30°C to +80°C |
| L: | -40°C to +85°C |

SPECIFICATION

| Parameter | 5v±10% | 3.3v±10% |
|--|---------------------------|----------|
| Frequency range (MHz) | 0.001~156 | 1~156 |
| Operating Temp. range (°C) | Refer to Numbering System | |
| Frequency Stability* | Refer to Numbering System | |
| Supply Current (mA) max | | |
| 0.001MHz ≤ F ₀ < 1.0MHz | 10 | |
| 1.0MHz ≤ F ₀ < 20MHz | 15 | 10 |
| 20MHz ≤ F ₀ < 50MHz | 40 | 30 |
| 50MHz ≤ F ₀ < 156MHz | 50 | 40 |
| Transition Time+: Rise/Fall Time (ns) max. | | |
| 0.001MHz ≤ F ₀ < 1.0MHz | 10 | 10 |
| 1.0MHz ≤ F ₀ < 20MHz | 8 | 6 |
| 20MHz ≤ F ₀ < 50MHz | 5 | 5 |
| 50MHz ≤ F ₀ < 100MHz | 4 | 3 |
| 100MHz ≤ F ₀ < 156MHz | 3 | |
| Storage Temp. Range (°C) | -55~+125 | |



*Inclusive of calibration at 25°C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration
 +Transition times are measured between 10% and 90% of V_{DD} with an output load of 15pF.

FBEQ. STABILITY VS. TEMP. PANGE

| Temp. (°C) | PPM | D: ±25 | G: ±50 | H: ±100 |
|------------|---------|--------|--------|---------|
| c | -20~+70 | ○ | ○ | ○ |
| D | -30~+80 | ○ | ○ | ○ |
| L | -40~+85 | ○ | ○ | ○ |

○: Standard △: Available (case by case) ×: Not available

| MODEL | FXFXXX | FXTXXX |
|-------|----------|---------|
| PIN | | |
| #1 | N. C. | 3-STATE |
| #7 | CASE GND | |
| #8 | OUTPUT | |
| #14 | VDD | |