

# **3.0V/5.0V LOW PROFILE TCXO** **MODEL: FOX801 SERIES**

## FEATURES

- 2.0mm Height Max
- Low Cost
- Clipped Sine Output
- Tape and Reel (2,000 pcs. STD)

## OPTIONS

- 'A' Version - 5.0V
- 'B' Version - 3.0V
- VCTCXO - AE/BE Version
- VCTCXO - AH/BH Version (trimmerless)



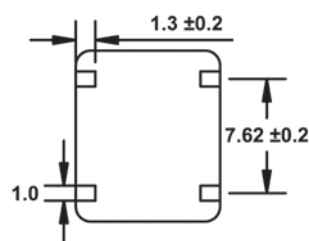
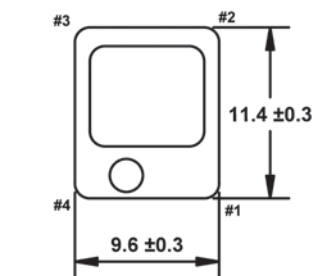
# Discontinued

Learn More about:  
[Part Marking Identification](#)  
[Tape and Reel Specification](#)  
 Internet required

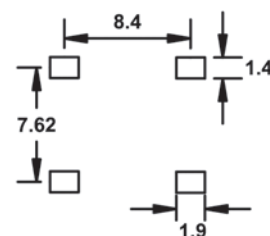
| • PART NUMBER SELECTION <a href="#">Learn More</a> - Internet Required |              |                     |                            |                       |
|------------------------------------------------------------------------|--------------|---------------------|----------------------------|-----------------------|
| Part Number                                                            | Model Number | Frequency Stability | Operating Temperature (°C) | Frequency Range (MHz) |
| 250-Frequency-xxxxx                                                    | FOX801A      | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |
| 251-Frequency-xxxxx                                                    | FOX801AE     | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |
| 252-Frequency-xxxxx                                                    | FOX801AH     | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |
| 253-Frequency-xxxxx                                                    | FOX801B      | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |
| 254-Frequency-xxxxx                                                    | FOX801BE     | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |
| 255-Frequency-xxxxx                                                    | FOX801BH     | see table           | -30 ~ +75                  | 10.000 ~ 50.000       |

| • ELECTRICAL CHARACTERISTICS                                  |                              |
|---------------------------------------------------------------|------------------------------|
| PARAMETERS                                                    | MAX (unless otherwise noted) |
| Frequency Range (Fo)                                          | 10.000 ~ 50.000 MHz          |
| Temperature Range                                             |                              |
| Operating (T <sub>OPR</sub> )                                 | -30°C ~ +75°C                |
| Storage (T <sub>STG</sub> )                                   | -35°C ~ +80°C                |
| Initial Frequency Tolerance (@25°C)                           |                              |
| V <sub>c</sub> = 2.5V (A Series) <sup>1</sup> FOX801A/B/AE/BE | ±0.5PPM                      |
| V <sub>c</sub> = 1.5V (B Series) <sup>1</sup> FOX801AH/BH     | ±2.0PPM                      |
| Supply Voltage (V <sub>DD</sub> )                             |                              |
| A Version                                                     | 5.0V ± 5%                    |
| B Version                                                     | 3.0V ± 5%                    |
| Input Current (I <sub>DD</sub> )                              | 2.0mA                        |
| Frequency Stability                                           |                              |
| Over Temperature Range                                        | ±2.5PPM                      |
| Over Supply Voltage Change (V <sub>DD</sub> ± 5%)             | ±0.3PPM                      |
| Over Load Change (10Ω ± 10% // 10pF ± 10%)                    | ±0.3PPM                      |
| Output Waveform (Clipped Sine)                                |                              |
| Peak-to-Peak Level (V <sub>p-p</sub> )                        |                              |
| A Version: 10.000 ~ 15.999 MHz                                | 1.0V Min                     |
| A Version: 16.000 ~ 50.000 MHz                                | 0.8V Min                     |
| B Version: 10.000 ~ 15.999 MHz                                | 0.8V Min                     |
| B Version: 16.000 ~ 50.000 MHz                                | 0.7V Min                     |
| Output Load                                                   | 10KΩ // 10pF                 |
| Frequency Adjustment (Internal Trimmer)                       |                              |
| FOX801A/B/AE/BE                                               | ±3.0PPM                      |
| FOX801AH/BH                                                   | Trimmerless                  |
| Voltage Control Option (VCTCXO) <sup>1</sup>                  |                              |
| A Version (V <sub>c</sub> =2.5±2.0V) FOX801A/B                | None                         |
| B Version (V <sub>c</sub> =1.5±1.0V) FOX801AE/BE              | ±5.0PPM Min                  |
| FOX801AH/BH                                                   | ±8.0PPM Min                  |
| Aging per year                                                | ±0.8PPM                      |

<sup>1</sup> For proper operation, a control voltage (V<sub>c</sub>) must be applied to pin 1 on VCTCXOs.  
 All specifications subject to change without notice. Rev. 6/1/04



### Recommended Solder Pad Layout



### Pin Connections

#1 V<sub>c</sub> or N.C.\* #3 Output  
 #2 GND #4 V<sub>DD</sub>  
 \* A, B is N.C. all other V<sub>c</sub>

All dimensions are in millimeters.