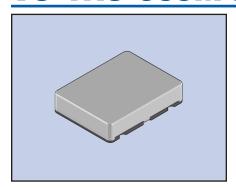
# VC-TXO-39SM SERIES VC-TCXO





The VC-TXO-39SM is a VC (Voltage Controlled) TCXO (Temperature Compensated Crystal Oscillator) featuring very tight stability over a wide temperature range. The small SMD ceramic package measures  $11.4 \times 9.6 \times 2.3$  mm. The voltage control has a tuning range of  $\pm$  12 ppm typical. The low profile package is ideal for wireless communications applications.

## **FEATURES**

- Highly stable output
- Wide temperature range
- Voltage control function
- Tape and Reel (500 pcs)

## **PART NUMBERING GUIDE**

| SERIES      |   | FREQUENCY | S | STABILITY / TEMPERATURE OPTION |  |  |
|-------------|---|-----------|---|--------------------------------|--|--|
| VC-TXO-39SM | - | 128       | - | Α                              |  |  |

Sample Part Number: VC-TXO-39SM-128-A, 128=12.8 MHz, A=±1.5 ppm -20 to +75°C

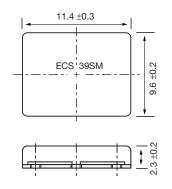
# STANDARD FREQUENCIES

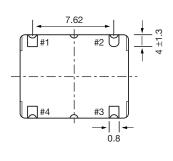
10.000, 13.000, 16.800 AND 19.440 MHz

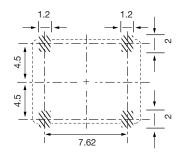
## **OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS**

| DADAMETERO               | CONDITIONS                    | ECS-3955C (5V) |      |        | шито  |
|--------------------------|-------------------------------|----------------|------|--------|-------|
| PARAMETERS               |                               | MIN            | TYP  | MAX    | UNITS |
| FREQUENCY RANGE          |                               | 10.000         |      | 19.440 | MHz   |
| FREQUENCY STABILITY/TEMP | Operating Temperature         |                |      |        |       |
| STANDARD                 | -30 ~ +75°C                   |                |      | ±2.5   | PPM   |
| OPTION A                 | -20 ~ +75°C                   |                |      | +1.5   | PPM   |
| SUPPLY VOLTAGE CHANGE    | +3V ±5%                       |                |      | +0.3   | PPM   |
| LOAD CHANGE              | 10k Ω ±10%//10pF ±10%         |                |      | +0.3   | PPM   |
| AGING                    | First Year @ +25°C            |                |      | ±1     | PPM   |
| STORAGE TEMPERATURE      |                               | -40            |      | +85    | °C    |
| SUPPLY VOLTAGE           | +3.0 V DC Nominal             | +2.85          | +3.0 | +3.15  | V DC  |
| CURRENT CONSUMPTION      | 10k Ω ±10%//10pF ±10%         |                |      | 1.5    | mA    |
| OUTPUT VOLTAGE           | Clipped sine wave (DC-Cut)    | 0.8            |      |        | Vp-p  |
| OUTPUT LOAD              | 10k Ω ±10%//10pF ±10%         |                |      |        |       |
| FREQUENCY CONTROL RANGE  | +1.5 V DC ± 1V Positive Slope | ±9             | ±12  |        | PPM   |
| CONTROL VOLTAGE          |                               | +0.5           | +1.5 | +2.5   | V     |

# PACKAGE DIMENSIONS (mm)







| PIN CONNECTIONS |          |  |  |  |
|-----------------|----------|--|--|--|
| #1              | VCONTROL |  |  |  |
| #2              | GND      |  |  |  |
| #3              | OUTPUT   |  |  |  |
| #4              | Vcc      |  |  |  |

Figure 1) VC-TXO-36SM Top, Side and Bottom views

Figure 2) Land Pattern