

# XO3070 Series

1x1 inch, 5.0 Volt, TTL/HCMOS/Sinewave, TCXO

- All output types
- Low power, high stability

| Model   | Frequency | Temperature | Temperature | Aging               | Output            | Supply      |
|---------|-----------|-------------|-------------|---------------------|-------------------|-------------|
| XO3070  | (MHz)     | Range (°C)  | Stability   | First Year          |                   | Voltage     |
| XO3070  | 20        | -30 to +90  | ±1.0 ppm    | ±1.0 ppm            | HCMOS             | 5 V ±0.25 V |
| XO3071  | 20        | -30 to +90  | ±1.0 ppm    | ±1.0 ppm            | Sinewave          | 5 V ±0.25 V |
| Options | 10 to 100 | See Table   |             | Frequency Dependent | Sine, TTL, AC MOS | 5 V to 15 V |

## Additional Specifications

|                      |                                               |
|----------------------|-----------------------------------------------|
| Aging over ten years | ±3.0 ppm max                                  |
| Current              |                                               |
| Sine                 | As low as 2 mA                                |
| HCMOS                | 12 mA                                         |
| Frequency Adjust     | Internal *(XO3070)                            |
| Method               | External 0 to 5 V or potentiometer **(XO3071) |
| Range                | 10 Years                                      |

## Output

|       |         |
|-------|---------|
| Level | HCMOS   |
| Load  | 2 Gates |

## Sine Wave Option

|       |                    |
|-------|--------------------|
| Level | 0 to +3 dBm (50 Ω) |
| Load  | 1 k Ω//10pF        |

## Environmental

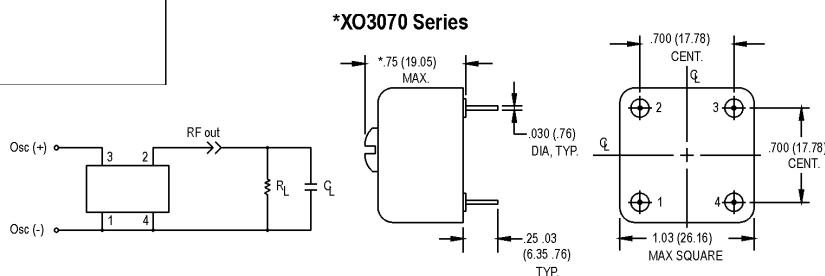
|           |                     |
|-----------|---------------------|
| Vibration | 10 g pk, 10-2000 Hz |
| Shock     | 50 g 11 ms 1/2 Sine |

## Phase Noise @ 20 MHz

|         |             |
|---------|-------------|
| 10 Hz   | -85 dBc/Hz  |
| 100 kHz | -120 dBc/Hz |
| 1 kHz   | -140 dBc/Hz |
| 10 kHz  | -150 dBc/Hz |

| Optional Temperature Range (°C) | ±1 | ±0.75 | ±0.50 | ±0.25 |
|---------------------------------|----|-------|-------|-------|
| +15 to +30                      | ✓  | ✓     | ✓     | ✓     |
| 0 to +50                        | ✓  | ✓     | ✓     | ✓     |
| 0 to +70                        | ✓  | ✓     | ✓     | ✓     |
| -20 to +70                      | ✓  | ✓     | ✓     | ✓     |
| -40 to +75                      | ✓  | ✓     | ✓     | ✓     |
| -55 to +85                      | ✓  | ✓     | ✓     | ✓     |

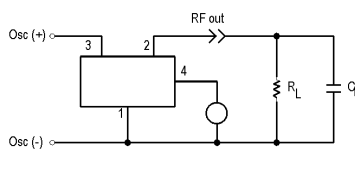
This TCXO can be produced to these specifications, with extended temperature range and tighter stability being cost drivers.



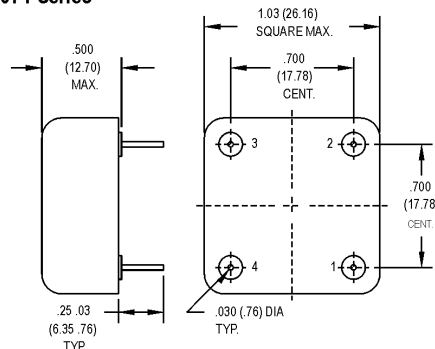
Dimensions are in inches (mm)

| Pin connections                |
|--------------------------------|
| 1. CASE GROUND & SUPPLY RETURN |
| 2. RF OUTPUT                   |
| 3. SUPPLY (+)                  |
| 4. CASE GROUND OR FREQ. ADJUST |

Pin numbers shown for ref. only.  
Numbers are not marked on unit.



## \*\*XO3071 Series



\* Internal Adjust  
\*\* External Adjust

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