



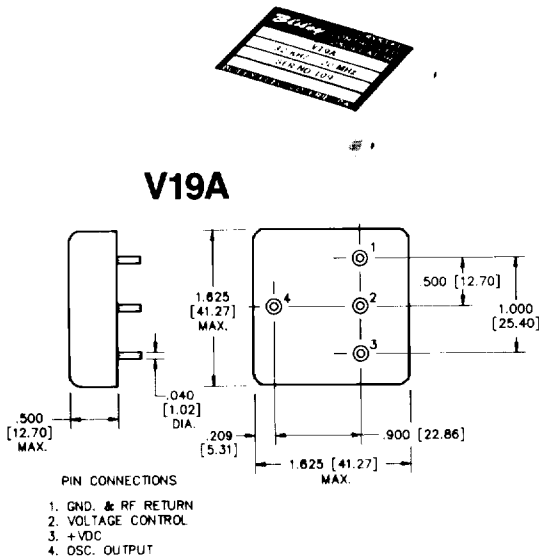
first name in frequency control

CRYSTAL OSCILLATORS

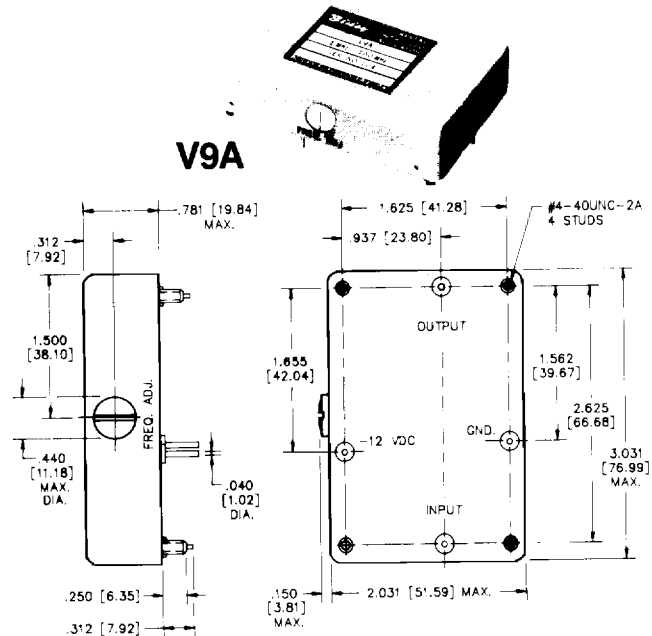
Voltage Controlled (VCXO)

CRYSTAL OSCILLATORS

BLILEY VOLTAGE CONTROLLED CRYSTAL OSCILLATORS combine inherent crystal stability and voltage controlled frequency deviation in a single solid state device.



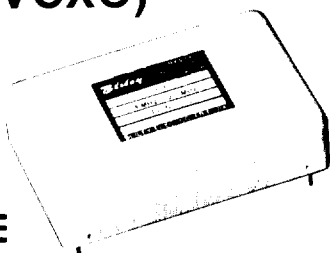
- Frequency Range:** 32 kHz to 20 MHz
- Frequency Stability:** $\pm .0015\%$
- Operating Temperature Range:** 0°C to +70°C
- Frequency Deviation:** $\pm .004\%$ minimum
- Linearity:** $\pm 20\%$ maximum
- Modulation Voltage:** +1V to +4V
- Transfer Function:** positive
- Output:** TTL compatible
- Supply Voltage:** +5 Vdc $\pm 5\%$
- Mounting:** PC board mount using 4 terminals
- Size:** 1.625" x 1.625" x .500" maximum
- Options:** High Speed CMOS Output



FREQUENCY DEVIATION	FREQUENCY STABILITY	TEMPERATURE RANGE
$\pm .01\%$	$\pm .001\%$ $\pm .002\%$	0°C to +50°C -20°C to +70°C
$\pm .05\%$	$\pm .002\%$ $\pm .005\%$	0°C to +50°C -20°C to +70°C
$\pm .1\%$	$\pm .004\%$ $\pm .008\%$	0°C to +50°C -20°C to +70°C
$\pm .2\%$	$\pm .005\%$ $\pm .01\%$	0°C to +50°C -20°C to +70°C

- Center frequency range from 1 to 100 MHz.
- Standard design parameters are based on operation with -12 Vdc; 25 mA supply. Other voltages may be specified as a custom option.
- Standard output is Sine Wave, typical 1V rms into 1000 ohms or .25V rms into 50 ohms.
- Mechanical trim is provided for center frequency adjustment.
- Typical modulation voltage is $\pm 5V$ with a modulating input impedance of 10K ohms and modulation rate from DC to 20 kHz.
- Linearity: $\pm 1\%$ to $\pm 5\%$ dependent upon frequency deviation.

Temperature Compensated Voltage Controlled (TCVCXO)



TV9E

- Frequency Range:** 4 MHz to 20 MHz
- Frequency Stability:** $\pm 1 \times 10^{-6}$ at any control voltage
- Operating Temperature Range:** 0°C to +60°C
- Electrical Frequency Control:**
 - a) Control Voltage: 0 to +10V
 - b) Range: ± 10 ppm to ± 15 ppm
 - c) Input Impedance: 2K ohms minimum

- Output:** TTL
- Aging:** 1×10^{-6} /year typical
- Supply Voltages:** +5 Vdc $\pm 5\%$ and +12 Vdc $\pm 5\%$ required
- Case Size:** 2.00" x 3.00" x 0.75" nominal
- Options:**
 - High Speed CMOS (HCMOS)
 - Sine Wave output & higher frequencies with a larger case size
 - Other supply voltages
 - Other case sizes