



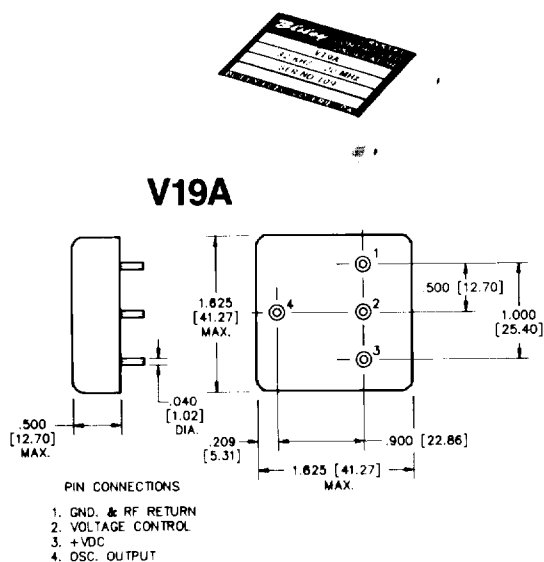
first name in frequency control

CRYSTAL OSCILLATORS

Voltage Controlled (VCXO)

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

CRYSTAL OSCILLATORS



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

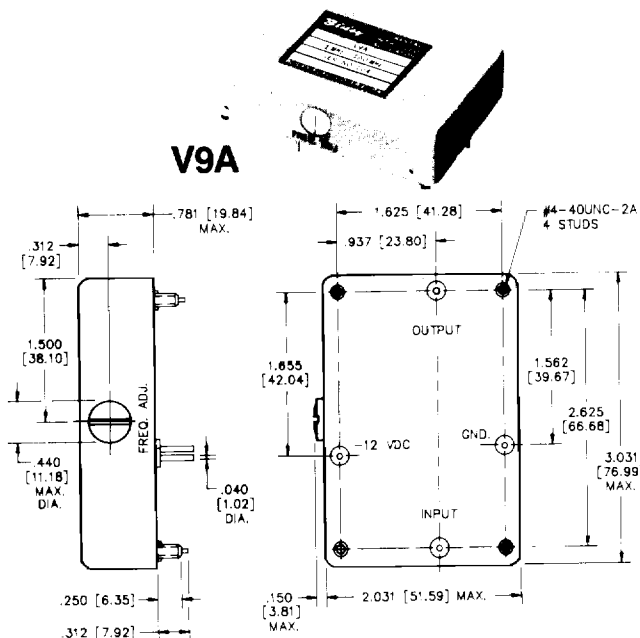
Output: TTL compatible

Supply Voltage: +5 Vdc $\pm 5\%$

Mounting: PC board mount using 4 terminals

Size: 1.625" x 1.625" x .500" maximum

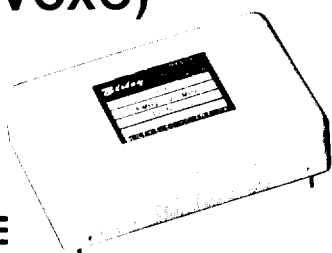
Options: High Speed CMOS Output



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