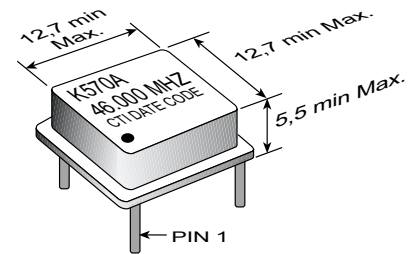


### 5V Voltage Controlled Crystal Oscillators

- ♦ **Applications:** Phase-Locked Loops (PLL's); Clock Recovery; Reference Signal Tracking; Synthesizers; Frequency Modulation/Demodulation
- ♦ 8-pin Half DIL Package
- ♦ 1.0 to 52.0 MHz Frequency Range
- ♦ 0.5V to 4.5V Control Voltage
- ♦  $\pm 25$ ppm Stability
- ♦  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$  Operating Temperature



## ELECTRICAL SPECIFICATIONS

<b>Model</b>	<b>K570A</b>	
<b>Frequency Range (MHz)</b>	1 to 52	
<b>Input Current (mA)</b>	< 26	
<b>Frequency Control Function</b>	(For Custom Deviation Range, Vc Range, etc. - Consult Factory)	
Deviation (ppm)		
Minimum	$\pm 100$	
Maximum	$\pm 150$	
Linearity (%)	< 10	
Modulation Bandwidth ( $\pm 3\text{dB}$ )	> 20KHz	
Nominal Control Voltage (V)	2.5	
Control Voltage Range (V)	0.5 to 4.5	
Transfer Function	Positive	
Input Impedance	> 50K $\Omega$ @ 10KHz	
<b>Frequency Stability (ppm)</b>		
Overall	Inclusive of Calibration, Temperature, Voltage, Load and Aging	
$0^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	$\pm 25$	
$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	$\pm 50$	
<b>Temperature Range (<math>^{\circ}\text{C}</math>)</b>		
Operating	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	
Storage	$-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$	
<b>Supply Voltage (V)</b>	$+5.0\text{V} \pm 5\%$	
<b>Symmetry (%) CMOS/TTL</b>	40/60	
<b>Start Up Time (ms)</b>	<10	
<b>Typical SSB Phase Noise (dBC/Hz)</b>	10Hz	-65
<b>Offset from Carrier</b>	100Hz	-95
	1KHz	-120
	10KHz	-140
	100KHz	-150

## PART NUMBERING GUIDE

**K570A XX** - Specify Frequency

- "Blank" =  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  Operating Temp.
- "M" =  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  Operating Temp.
- "A" =  $\pm 25$ ppm ( $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  Op. Temp. Only)
- "B" =  $\pm 50$ ppm

