

## Voltage Controlled Temperature Compensated Crystal Oscillator

- Excellent frequency stability
- Wide operating temperature range
- HCMOS output, tight specifications and an internal trimmer
- Suited for communications equipment, cellular radios, and instrumentation.

TO511V

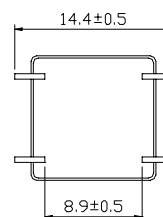
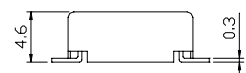
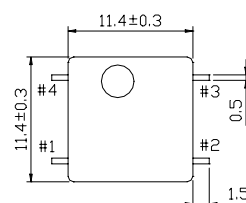
### Specifications:

<b>Frequency Range:</b>	1.2 MHz ~ 45.0 MHz	
<b>Operating Temperature:</b>	0°C ~ +50°C	- A
	-10°C ~ +60°C	- B
	-20°C ~ +70°C	- C
	-30°C ~ +75°C	- D
	-40°C ~ +85°C	- E
<b>Storage Temperature:</b>	-40°C ~ +85°C	
<b>Frequency Stability:</b>		
Vs. Temperature:	± 5.0 ppm	
	± 3.0 ppm	
	± 2.5 ppm	
	± 2.0 ppm	
	± 1.5 ppm	
	± 1.0 ppm	
Vs. Input Voltage:	± 0.3 ppm at voltage ± 5%	
Vs. Load:	± 0.2 ppm at load ± 10%	
Vs. Shipping:	± 0.5 ppm at 25°C ± 2°C	
Aging:	± 1.0 ppm max first year	
<b>Output Level:</b>	"0" level = 0.5V	
	"1" level = VDD -10% min	
<b>Output Waveform:</b>	HCMOS	
<b>Output Load:</b>	30 pF HCMOS / 5 TTL	
<b>Duty Cycle:</b>	50% (±5%)	
<b>Rise / Fall Time:</b>	10 ns max	
<b>Frequency Adjustment:</b>	± 3.0 ppm min with internal trimmer	
<b>Supply Voltage:</b>	+3.0 VDC (± 0.2%)	
	+5.0 VDC (± 0.3%)	- P
<b>Supply Current:</b>	20 mA max	
<b>Voltage Controlled Range:</b>	5 ~ ± 80 ppm (2.5V ± 2V typ.)	

Note:

1. Other frequencies, stabilities, and operating temperature ranges available. Consult VTC Support for specific requirements.
2. Not all combinations of the above, stabilities, and temperature ranges are available. Consult VTC Support if your requirement is not standard.
3. All specifications subject to change without notice.

### TO-E



Pin	Configurations
1	Supply VDD
2	VC or NG
3	Ground
4	Output

All dimensions are in mm

### Ordering Information

Product name + Operating Temperature + Stability + Frequency (MHz) + Other Specification Code.

i.e. TO511VB2.0-8.0MHz ±2.0ppm, -10°C~+60°C, 3.0V

Or TO511VB1.5P-8.0MHz ±1.5ppm, -10°C~+60°C, 5.0V