

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.

TO513V

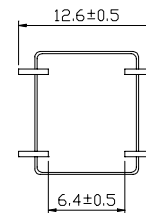
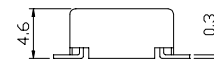
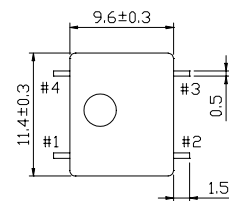
Specifications:

Frequency Range:	1.2 MHz ~ 45.0 MHz	
Operating Temperature:	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
Storage Temperature:	-40°C ~ +85°C	
Frequency Stability:		
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	
Output Level:	“0” level = 0.5V	
	“1” level = VDD –10% min	
Output Waveform:	HCMOS	
Output Load:	30 pF HCMOS / 5 TTL	
Duty Cycle:	50% (±5%)	
Rise / Fall Time:	10 ns max	
Frequency Adjustment:	± 3.0 ppm min with internal trimmer	
Supply Voltage:	+3.0 VDC (± 0.2%)	
	+5.0 VDC (± 0.3%)	- P
Supply Current:	20 mA max	
Voltage Controlled Range:	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-F



Pin	Configurations
1	Supply V _{DD}
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. TO513VB2.0-8.0MHz ±2.0ppm, -10°C~+60°C, 3.0V

Or TO513VB1.5P-8.0MHz ±1.5ppm, -10°C~+60°C, 5.0V