

Temperature Compensated Crystal Oscillator

- Excellent frequency stability
- Small size SMD, reflow soldering available
- Clipped-sine/CMOS output, tight specifications
- Suited for communications equipment, cellular radios, and instrumentation.

TO518

Specifications:

Frequency Range: 10.000 MHz ~ 40.0000 MHz

Operating Temperature:

0°C ~ +55°C	- A
-10°C ~ +60°C	- B
-20°C ~ +70°C	- C
-30°C ~ +75°C	- D
0°C ~ +85°C	- E
-40°C ~ +85°C	- U

Storage Temperature: -40°C ~ +85°C

Frequency Stability:

Vs. Temperature: ± 5.0 ppm
± 3.0 ppm
± 2.5 ppm

Vs. Input Voltage: ± 0.2 ppm at voltage ± 5%

Vs. Load: ± 0.2 ppm at load ± 10%

Aging: ± 1.0 ppm max first year

Pulling Range:

V_{ss}+0.5V ~ V_{cc} -0.5V: 5 ~ 16 ppm/V (optional)

Control Slope: Positive

Start-Up Time: 8 ms max

Output Waveform: Clipped-Sine/10KΩ//10pF - S
CMOS/15pF/50±5% - C

Output Voltage: 0.8 V_{p-p} min.

SSB Phase Noise: -135 dBc/Hz (offset 1KHz)

Frequency Adjustment: ± 3.0 ppm min with internal trimmer

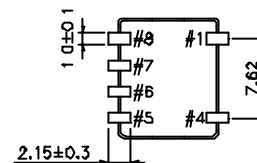
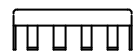
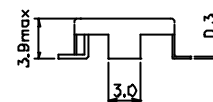
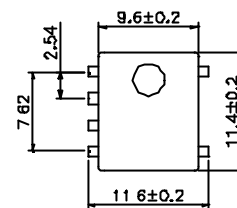
Supply Voltage: +3.3 VDC (± 0.2%)
+5.0 VDC (± 0.3%) - P

Supply Current: 2.5 mA max

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-J



Pin	Configurations
#1,4,6	Ground
#5	Output
#7	NC or Vcon
#8	Supply V _{DD}

All dimensions are in mm

Ordering Information

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

i.e. TO518B2.5S-8.0MHz ±2.5ppm/-10°C~+60°C/3.3V
Or TO518D2.5CP-8.0MHz ±2.5ppm/-30°C~+75°C/5.0V