

Temperature Compensated Crystal Oscillator

- Excellent frequency stability
- Ultra miniature size SMD, reflow soldering available
- Clipped sine and HCMOS output, tight specifications
- Suited for communications equipment, cellular radios, and instrumentation.
- Complies with Directive 2002/95/EC (RoHS Compliant)

TO520

Specifications:

Frequency Range: 10.000 MHz ~ 36.0000 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	- L

Storage Temperature: -40°C ~ +85°C

Frequency Stability:

Vs. Temperature:	± 1.0 ppm ~ ± 5.0 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

Supply Current:

10 MHz ~ 15 MHz	1.5 mA max
15 MHz ~ 26 MHz	2.0 mA max
25 MHz ~ 36 MHz	2.5 mA max

Pulling Range: TCXO - T
VC-TCXO - V

Pulling: ±5ppm ~ ±10ppm min.

Start-Up Time: 2 ms (typical)

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

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

SSB Phase Noise: - 90 dBc/Hz (offset 10Hz)
(Typical at 12.8 MHz) -115 dBc/Hz (offset 100Hz)
-135 dBc/Hz (offset 1KHz)
-148 dBc/Hz (offset 10KHz)

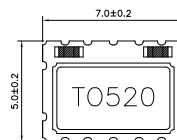
Supply Voltage: +3.0 VDC (± 5%)
+5.0 VDC (± 5%) - P

Note:

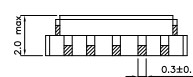
1. Other frequencies, stabilities, and operating temperature ranges available. Consult VTC Support for specific requirements.
2. Not all combinations of the above, stabilities, and temperature ranges are available. Consult VTC Support if your requirement is not standard.
3. All specifications subject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

TO-C

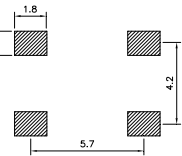
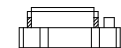
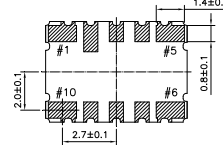
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



Land Pattern

Pin	Configurations
#1	VC or NC
#5	Ground
#6	Output
#10	Supply V _{DD}

All dimensions are in mm

Ordering Information

Product name + Operating Temperature + Stability + Pulling Range + Frequency (MHz)

i.e. TO520B2.5TS-10.0MHz TCXO/±2.5ppm/-10~+60°C/3.3V or
TO520D2.5V8SP-10.0MHz VC-TCXO/±2.5ppm /-30~+75°C/5.0V/Pulling:
±8ppm