

### Frequency Stability Options

Operating Temperature Range		Frequency Stability (PPM)					
		±1	±2	±2.5	±3.0	±4.0	±5.0
Standard	-0°C to +50°C	✓	✓	✓	✓	✓	✓
Industrial	-30°C to +85°C	✗	✓	✓	✓	✓	✓

### Marking & Specification Code Format

Type	Voltage Code	OTR/Stability	Frequency	Pulling	WWYY
V/MWP***	3	See Above	ie 27.0000	in PPM	1611

### Operating Conditions

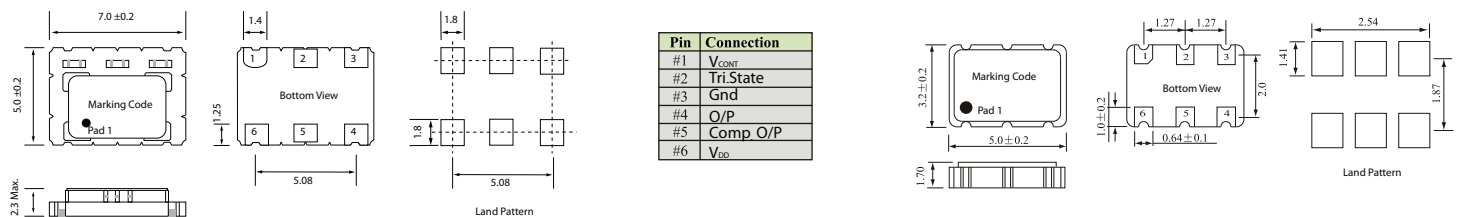
Storage Temp	-55°C to +125°C
Option Codes	
Supply Voltage	Option Code
+3.3V DC	3

Other Temp./stabilities available

### Parameter Condition Value

Input Current 15pF Load	< 24 MHz	25mA Max.				
	24.01 to 800.00 MHz	100mA Max.				
Frequency Stability	Over Temperature	See Options Above				
	vs Ageing	≤ ±1.0PPM 1st year at 25°C				
	vs Voltage Change	≤ ±0.3PPM for a 5% input voltage change				
	vs Load Change	≤ ±0.3PPM for a 10% load change				
Symmetry	vs Reflow Solder	≤ ±0.3PPM 260°C reflow after 24hrs				
	@50% V <sub>DD</sub> Level	50% ±5%				
Output Voltage	"1" Level	V <sub>OH</sub> = 2.275V <sub>(Min.)</sub> ; V <sub>DD</sub> = -1.025V <sub>(Min.)</sub> ; R <sub>L</sub> =50Ω to V <sub>DD</sub> -2.0V				
	"0" Level	V <sub>OL</sub> = 1.680V <sub>(Max.)</sub> ; V <sub>DD</sub> = -1.620V <sub>(Max.)</sub> ; R <sub>L</sub> =50Ω to V <sub>DD</sub> -2.0V				
Rise/Fall Time	20% to 80% of PECL Waveform	1.5ns Max.				
Start Up Time	0V to V <sub>DD</sub>	10mS Max.				
Load		R <sub>L</sub> =50Ω to (V <sub>DD</sub> -2.0V)				
VC-TCXO VMWP Only	Control Voltage	1.5V ±1.0V				
	Pulling Range	Standard	±5PPM Min.			
	Slope Polarity	Positive				
	Modulation Bandwidth	25kHz Min.				
SSB Phase Noise at 25°C	Linearity	10% Max.				
	Offset	10Hz	100Hz	1kHz	10kHz	100kHz
		155.520 MHz	-65dBc/Hz	-95dBc/Hz	-120dBc/Hz	-125dBc/Hz
622.080 MHz	-55dBc/Hz	-85dBc/Hz	-109dBc/Hz	-115dBc/Hz	-110dBc/Hz	
Phase Jitter (RMS)	12 kHz to 20 MHz	2.6ps (Typ.) : 4.0ps (Max.) for 155.520 MHz				
Period Jitter (Typ.)	Frequency Range	38.880 MHz	77.760 MHz	155.520 MHz	622.080 MHz	
	(RMS)	2.2ps	3.5ps	4.3ps	5.0ps	
	Peak to Peak	17.0ps	25.0ps	27.0ps	32.0ps	

### Dimensions (mm)



AEL VMWP430-Series VC-TCXO  
AEL MWP430-Series TCXO

AEL VMWP600-Series VC-TCXO  
AEL MWP600-Series TCXO