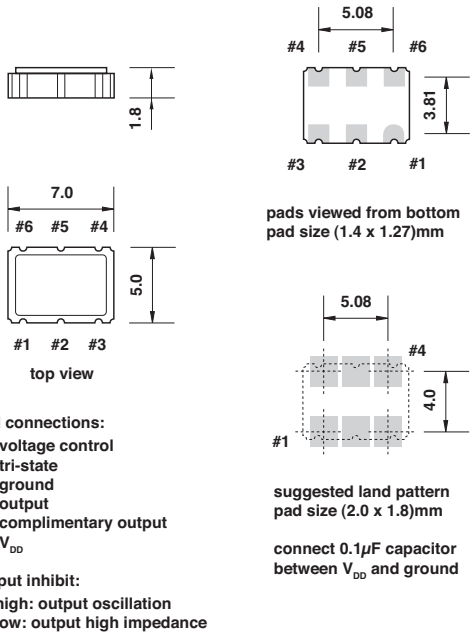
Type VT - L,V smd VCXO (1.5 ~ 200)MHz, output PECL or LVDS (7.0 x 5.0)mm, height 1.8mm

A high frequency, smd, voltage controlled crystal oscillator manufactured over the frequency range of 1.5MHz to 200MHz. Good linearity, wide pulling range, +3.3V d.c. and 2.5Vd.c. supply.

A standard package providing an excellent combination of parameters within a small smd enclosure.

Supplied on tape and reel with 1000 and 3000 pieces per reel.

Dimensions(mm)



pad connections:
#1 voltage control
#2 tri-state
#3 ground
#4 output
#5 complimentary output
#6 V_{DD}

output inhibit:
#2 high: output oscillation
#2 low: output high impedance

Frequency stability -vs- temperature:

TEMP. RANGE	COMBINED TOLERANCE	
(-10 +60)°C	±25ppm	±50ppm
(-20 +70)°C	±25ppm	±50ppm
(-40 +85)°C		±50ppm
Tolerance inclusive of calibration tolerance at +25°C, temperature tolerance, load variation and supply voltage variation, first year ageing, vibration and shock		

Electrical specification:

	PECL				LVDS				
	3.3Vd.c.		2.5Vd.c.		3.3Vd.c.		2.5Vd.c.		
	min.	max.	min.	max.	min.	max.	min	max.	
supply voltage V_{DD} ±5%	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	Vd.c.
frequency range	1.5	200	65	200	1.5	200	65	200	MHz
pulling range	±50								ppm
control voltage range	0.3	3.0	0	2.5	0.3	3.0	0	2.5	V
supply current (1.5 ~ 65)MHz	-	75	-	75	-	45	-	45	mA
supply current (65 ~ 200)MHz	-	100		100	-	80	-	80	mA
o/p high	2.275	-	1.475	-	-	1.6	-	1.6	V
o/p low	-	1.68	-	1.095	0.9	-	0.9	-	V
rise and fall time, t_r	-	1.0	-	1.0	-	1.0	-	1.0	nano sec.
start up time	-	3	-	3	-	3	-	3	milli sec.
tri-state: active o/p	-	$0.3V_{DD}$	-	$0.3V_{DD}$	-	$0.3V_{DD}$	-	$0.3V_{DD}$	V
tri-state: high impedance o/p	$0.7V_{DD}$	-	$0.7V_{DD}$		$0.7V_{DD}$	-	$0.7V_{DD}$	-	V
linearity	-	10	-	10	-	10	-	10	%
modulation bandwidth	25	-	25	-	25	-	25	-	kHz
input impedance	50	-	50	-	50	-	50	-	KΩ
RMS phase jitter(integrated 12kHz ~ 20MHz)									
f_0 < 100MHz	-	1.0	-	1.0	-	1.0	-	1.0	pico.sec
100MHz < f_0 <125MHz	-	0.7	-	0.7	-	0.7	-	0.7	
125MHz < f_0 < 150MHz	-	0.5	-	0.5	-	0.5	-	0.5	
150MHz < f_0	-	0.3	-	0.3	-	0.3	-	0.3	
ageing	-	±3	-	±3	-	±3	-	±3	ppm
storage temperature range	(-55 +125)°C								°C

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Ordering information

EXAMPLE	type VT - L smd VCXO, 155.52MHz, ±50ppm pulling, +3.3Vd.c., ±25ppm(-10 +60)°C, output PECL
TFC PART NUMBER	**VT - L 155.52M E M I**
VT - L	type: VT = VCXO type VT; (7.0 x 5.0)mm package, L; PECL output, V; LVDS output
155.52	frequency: 155.52MHz, frequency range (1.5 ~ 200)MHz
E	supply voltage: E = +3.3Vd.c.
M	frequency stability: M = ±25ppm
I	temperature range: I = (-10 +60)°C
OPTIONS	
supply voltage	E: +3.3Vd.c., J: +2.5Vd.c.
output	L: PECL, V: LVDS
frequency stability	M: ±25ppm, P: ±50ppm
temperature range	I: (-10 +60)°C, C: (-20 +70)°C, L: (-40 +85)°C

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