

A high quality, ceramic smd, crystal clock oscillator manufactured over the wide frequency range of 21.6kHz to 166MHz. Low supply current, tight symmetry, supply voltage from 1.8Vd.c. to 3.3Vd.c.

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

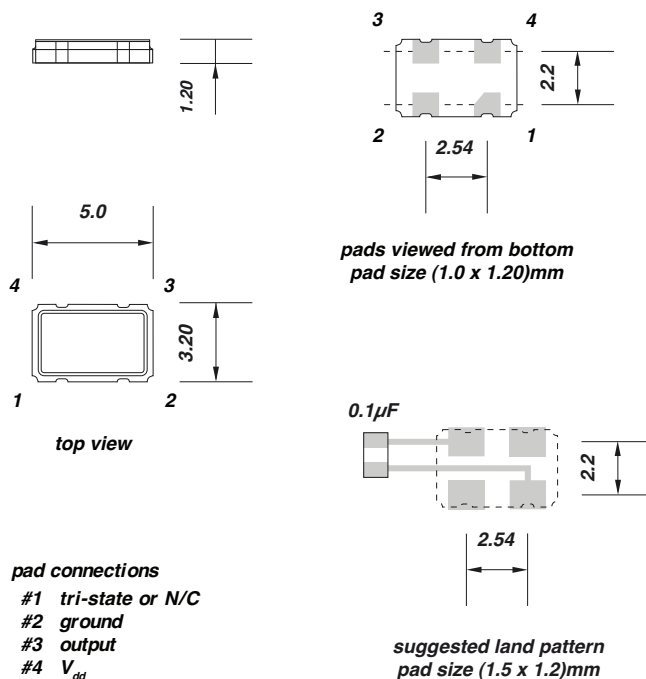
Supplied on tape and reel, 1000, 2000, 3000 or 5000 pieces per reel.

Frequency stability -vs- temperature:

TEMP. RANGE	COMBINED TOLERANCE		
	(-10 +60)°C	±20ppm	±25ppm
(-20 +70)°C	±20ppm	±25ppm	±50ppm
(-40 +85)°C		±25ppm	±50ppm

Tolerance inclusive of calibration tolerance at +25°C, temperature tolerance, load variation and supply voltage variation, first year ageing, vibration and shock

Dimensions(mm)



Electrical specification:

	3.3Vd.c.		2.5Vd.c.		1.8Vd.c.		
	min.	max.	min.	max.	min.	max.	
supply voltage ±10%	2.97	3.63	2.25	2.75	1.62	1.98	Vd.c.
frequency range	0.0216	166	0.0216	133	0.0216	125	MHz
supply current 21.6kHz ~ 93kHz	-	1	-	0.5	-	0.1	mA
supply current 312.5kHz ~ 50MHz: A1	-	10	-	8	-	7	mA
supply current (40 ~ 75)MHz	-	20	-	18	-	15	mA
supply current (75 ~ 133)MHz	-	35	-	30	-	25	mA
supply current (133 ~ 166)MHz	-	45	-	40	-	-	mA
output CMOS 15pF o/p high	90% V _{DD}	-	90% V _{DD}	-	90% V _{DD}	-	V
output CMOS 15pF o/p low	-	10% V _{DD}	-	10% V _{DD}	-	10% V _{DD}	V
t _r (21.6kHz ~ 93kHz)	-	50	-	50	-	50	nano sec.
t _r (312.5kHz ~ 100MHz)	-	5	-	5	-	5	nano sec.
t _r (100 ~ 166)MHz	-	3	-	3	-	3	nano sec.
start up time	-	5	-	5	-	5	milli sec.
output drive capability	-	15	-	15	-	15	pF
tri-state: active o/p	0.7V _{DD}	-	0.7V _{DD}	-	0.7V _{DD}	-	V
tri-state: high impedance o/p	-	0.3V _{DD}	-	0.3V _{DD}	-	0.3V _{DD}	V
absolute clock period jitter	-	40	-	40	-	40	pico sec.
rms phase jitter (integrated 12kHz ~ 20MHz)	-	1	-	1	-	1	
standby current	-	10	-	10	-	10	µA
ageing 1st year	-	±3	-	±3	-	±3	ppm
storage temperature range	(-55 ~ +125)						°C

Electrical specification:

EXAMPLE	<i>type OV smd clock, 25.00MHz, +3.3Vd.c., fixed frequency with tri state, ±25ppm(-20 +70)°C, output symmetry 40% ~ 60%, CMOS 15pF</i>
TFC PART NUMBER	OV 25.00M E T D C K
OV	<i>type: OV = clock oscillator type OV</i>
25.00M	<i>frequency: 25.00MHz, frequency range (0.0216 ~ 166)MHz, frequency dependent</i>
E	<i>supply voltage: E = +3.3Vd.c.</i>
T	<i>tri state: T = fixed frequency with tri state</i>
D	<i>frequency stability: D = ±25ppm</i>
C	<i>temperature range: C = (-20 +70)°C</i>
K	<i>symmetry: K = 40% ~ 60%</i>
OPTIONS	
supply voltage	<i>E: +3.3Vd.c., J: +2.5Vd.c., K: +1.8Vd.c</i>
frequency stability	<i>C: ±20ppm, D: ±25ppm, G: ±50ppm</i>
temperature range	<i>I: (-10 +60)°C, C: (-20 +70)°, L: (-40 +85)°C</i>
output symmetry	<i>J: 45% ~ 55%, K: 40% ~ 60%; CMOS 15pF</i>