

Type OWM smd clock oscillator multiplier frequency, fast delivery, (8 ~ 250)MHz, output CMOS, low jitter, (5.0 x 3.2)mm, height 1.30mm

Fast delivery XO for prototyping and production quantities.

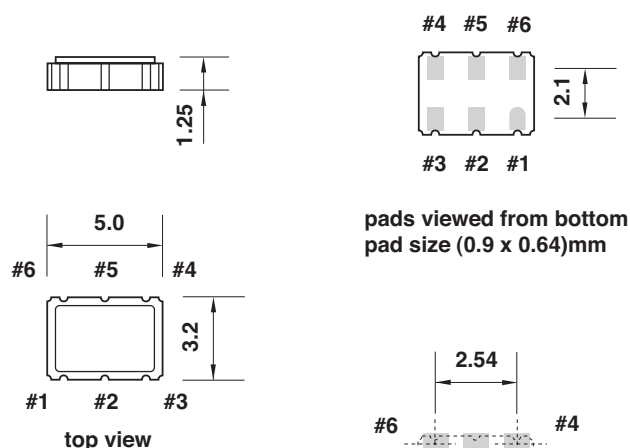
A high frequency, smd clock oscillator manufactured over the frequency range of 8MHz ~ 250MHz.

Low jitter, 3rd overtone crystal design, +3.3V d.c. and 2.5Vd.c. supply. Very low phase noise.

An industry standard ceramic (5.0 x 3.2)mm package providing an excellent combination of parameters within a small smd enclosure.

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

Dimensions(mm)



pads viewed from bottom
pad size (0.9 x 0.64)mm

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

suggested land pattern
pad size (1.2 x 0.85)mm

connect 0.1 μ F capacitor
between V_{DD} and ground -
pads #6 and #3

Frequency stability -vs- temperature:

TEMP. RANGE	COMBINED TOLERANCE	
	(-10 +60) $^{\circ}$ C	± 25 ppm
(-20 +70) $^{\circ}$ C	± 25 ppm	± 50 ppm
(-40 +85) $^{\circ}$ C	conditional	± 50 ppm

Tolerance inclusive of calibration tolerance at +25 $^{\circ}$ C, temperature tolerance, load variation and supply voltage variation, first year ageing, vibration and shock

Electrical specification:

	CMOS				
	3.3Vd.c.		2.5Vd.c.		
	min.	max.	min.	max.	
supply voltage $V_{DD} \pm 5\%$	3.135	3.465	2.375	2.625	Vd.c.
frequency range	(8 ~ 250)MHz				MHz
standard frequencies	106.25, 125, 133.33, 150.00, 155.52, 156.25, 158.25, 187.5, 212.5				MHz
supply current (8 ~ 250)MHz	-	30	-	30	mA
o/p high (logic 1)	2.97	-	2.25	-	V
o/p low (logic 0)	-	0.33	-	0.25	V
rise and fall time, t_r	-	1.5	-	1.5	nano sec.
start up time	-	10	-	10	milli sec.
tri-state input to pin #1 or #2: active o/p	2.31	-	1.75	-	V
tri-state input to pin #1 or #2: high impedance o/p	-	0.99	-	0.75	V
RMS phase jitter(integrated 12kHz ~ 20MHz)	1.0				pico.sec
Phase noise @125MHz					
100Hz	-	75	-	75	dBc/Hz
1kHz	-	105	-	105	
10kHz	-	120	-	120	
ageing first year at +25 $^{\circ}$ C	-	± 3	-	± 3	ppm
storage temperature range	(-55 +125) $^{\circ}$ C				$^{\circ}$ C



Ordering information

EXAMPLE	<i>type OWM CMOS smd clock oscillator, 155.52MHz, +3.3Vd.c. supply, inhibit on pin #2, ±50ppm(-10 +60)°C, output CMOS</i>
TFC PART NUMBER	OWM 155.52M E M G I J
OWM	<i>type: OWM = clock oscillator type OWM, smd, (5.0 x 3.2)mm</i>
155.52	<i>frequency: 155.52MHz, frequency range (8 ~ 250)MHz</i>
E	<i>supply voltage: E = +3.3Vd.c.</i>
M	<i>inhibit pin: M = inhibit on pin #2</i>
G	<i>frequency stability: G = ±50ppm</i>
I	<i>temperature range: I = (-10 +60)°C</i>
J	<i>output: J = CMOS</i>
OPTIONS	
supply voltage	<i>E: +3.3Vd.c., J: +2.5Vd.c.</i>
inhibit pin	<i>M: inhibit on pin #2, N: inhibit on pin #1</i>
frequency stability	<i>D: ±25ppm, G: ±50ppm</i>
temperature range	<i>I: (-10 +60)°C, C: (-20 +70)°C, L: (-40 +85)°C</i>
output	<i>J: CMOS 15pF, symmetry (45 ~ 55)%</i>