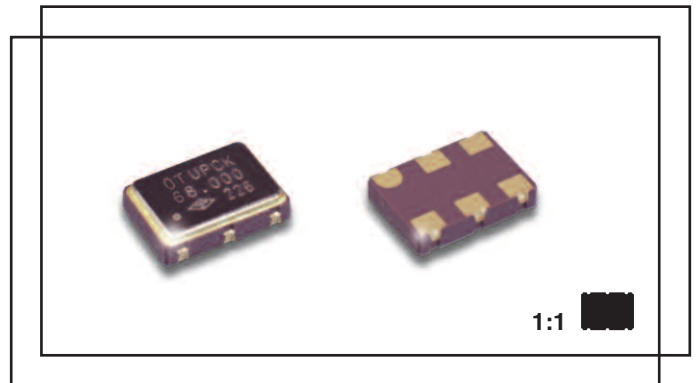


## Type OT clock oscillator (38.88 ~ 250)MHz

- # tight symmetry
- # (7.5 x 5.0)mm footprint
- # +2.5Vd.c., +3.3Vd.c. supply
- # RoHS compliant



### Electrical specification

<b>Case style</b>	T: (7.5 x 5.0)mm, height 2.0mm	
<b>Frequency range</b>	(38.88 ~ 250)MHz	
<b>Stability *</b>	±(25 ~ 100)ppm, temperature range dependent	
<b>Supply voltage V<sub>dd</sub></b>	+2.5Vd.c. ±5% or +3.3Vd.c. ±5%	
<b>Supply current max.</b>	(38.88 ~ 160)MHz	75mA max. PECL    50mA max. LVDS
	(160 ~ 250)MHz	100mA max. PECL    50mA max. LVDS
<b>Rise and fall time max. **</b>	1ns max.	
<b>Start up time</b>	3milli sec.	
<b>Operating temperature</b>	(-10 +60)°C ~ (-40 +85)°C	
<b>Storage temperature</b>	(-55 +125)°C	
<b>Output</b>	PECL, LVDS	
<b>Phase jitter, integrated 12kHz ~ 20MHz</b>	1ps max.	
<b>Symmetry</b>	(45 ~ 55)%	
<b>Ageing</b>	±5ppm first year max.	

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

\*\* measured between (20 ~ 80)% V<sub>dd</sub>

### Ordering information

**Example .... type OT smd clock oscillator, 156.25MHz, +3.3Vd.c., tri-state input to pad 2 ±50ppm(-20 +70)°C, output PECL, symmetry (45 ~ 55)%**

**TFC PART NUMBER .... OT 156.25M E T G C L**

'OT' .... type number: OT = smd clock oscillator type OT

'156.25M' .... frequency: 156.25M = 156.25MHz, frequency range from (38.88 ~ 250)MHz

'E' .... supply voltage: E = +3.3Vd.c.

'T' .... Tri-state function: T = input to pad 2

'G' .... frequency stability: G = ±50ppm

'C' .... temperature range: C = (-20 +70)°C

'L' .... output logic and symmetry: L = PECL (45 ~ 55)%

**Supply voltage:** E = +3.3Vd.c., J = +2.5Vd.c.

**Tri-state function:** T = input to pad 2, R = input to pad 1 ..... customer specified

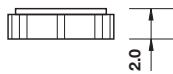
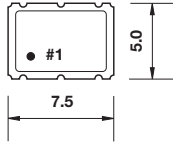
**Frequency stability:** D = ±25ppm, G = ±50ppm, H = ±100ppm

**Temperature range:** I = (-10 +60)°C, C = (-20 +70)°C, L = (-40 +85)°C

**Output logic and symmetry:** L = PECL (45 ~ 55)%, V = LVDS (45 ~ 55)%

## Type OT clock oscillator

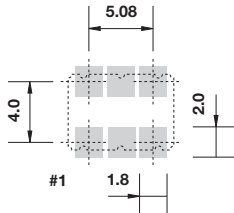
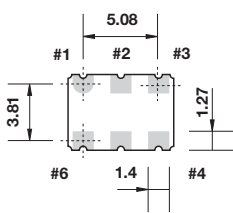
### OT dimensions(mm) shown twice full size



#### Suggested land pattern

Pads are gold, 2.5µ min., over nickel, suitable for vapour phase or reflow soldering, preheat +150°C for 2 minutes, peak temperature +250°C for 30 seconds max.

Connect 0.1µF capacitor between Vdd and ground



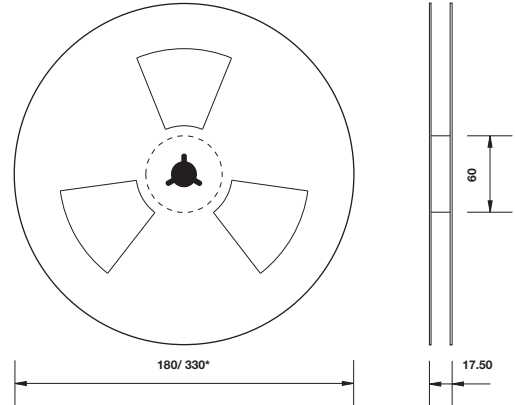
#### Pads viewed from bottom

- #1 N/C or tri-state
- #2 tri-state or N/C
- #3 ground
- #4 output
- #5 complimentary output
- #6 Vdd

Output inhibit: pad #1 or pad #2:

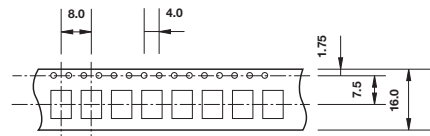
- +2.0Vd.c. min, 2.5Vd.c. supply: output active
- +2.5Vd.c. min, 3.3Vd.c. supply: output active
- +0.5Vd.c. max: output high impedance

### Tape and reel dimensions(mm)



Centre hole diameter 13.0mm, slot width 2mm spaced at 120°  
Reel quantity 1000\* pieces for 180mm diameter reel or 3000\* pieces for 330mm diameter reel, leader tape 400mm minimum

Trailer tape: 10 empty compartments minimum



Tape transport hole diameter 1.5mm, 4.0mm pitch  
Compartment size 8.18mm x 5.56mm, depth 2.16mm  
Component spacing on 8.0mm pitch