3.3V CMOS Oscillator Low Power

OC1T

Specifications

Parameters	Product OC1T	Option Codes
Terminations:		
SM, Gold flashed pads	■	T1D
SM, Ni+Sn plated pads	□	T2D
Frequency: 32.7680kHz	■	
Calibration tolerance: ±30ppm	■	
±20ppm	□	B
±10ppm	□	A
Other	□	specify
Frequency stability:		
0 ~ -10ppm (0 to +50°C)	■	
0 ~ -30ppm (-20 to +70°C)	■	
0 ~ -50ppm (-40 to +85°C)	■	
Operating temperature range: -40 to +85°C	■	
Storage temperature range: -55 to +125°C	■	
Turnover temperature (T_0): +20°C	■	
Frequency / temp coefficient: -0.012ppm/°C^2	■	
Supply voltage (V_{DD}): 3.3V	■	
Operable from 2.3 ~ 3.6V	□	
Voltage coefficient: ±3ppm/V max	■	
Supply current (max): 10µA (V_{DD} = 3.3V, no load)	■	
Driving ability: 15pF CMOS	■	
Output voltage:		
'0' level (I_{VOL}) = 0.4V max	■	
'1' level (I_{VOH}) = 90%V_{DD} min	■	
Start up time: 3s max	■	
Rise / fall times: 100ns max	■	
Enable / disable function: Tristate (control via pad 1)	■	
Shock and vibration resistance:		
±5ppm, 5,000g, 0.3ms, ½ sine	■	
±5ppm, 20g, 10.0 ~ 2,000Hz	■	
Soldering condition: Reflow, 260°C, 20 sec max	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

Dimensions

8.00 × 3.70

1.75 (max)

ACTUAL SIZE

SOLDER PAD LAYOUT

3.00

1.00

1.60

1.60

1.20 1.20

1.20

2.40

1.80 5.00 1.80

TOP VIEW

PAD	CONNECTION
1	Enable/Disable
2	Ground
3	Output
4	Supply

Scale 2:1

Features

▶ **Excellent temperature performance**

▶ **Low power consumption**

▶ **High shock and vibration resistance**

▶ **Miniature ceramic package**

Temperature Characteristics

Δf/f (ppm) vs Temperature (°C)
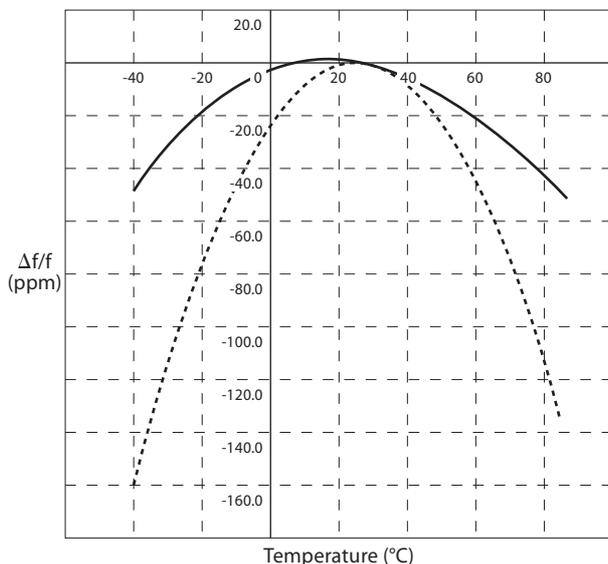
- - - - Conventional Tuning Fork   ——— OC1T Oscillator

Enable / Disable Function

Input (pad 1)	Output (pad 3)
Open	Enabled
'1' level	Enabled
'0' level	High Impedance

Ordering Information

Package type + termination + option codes + frequency
eg: **OC1T-T1D 32.768kHz** ±30ppm (standard)
Option code X (eg OC1T-T1D/X) denotes a custom spec.

♦ Available on T&R - 1k, 2k or 4k pcs per reel.
♦ Refer to our website for T&R and soldering details.