




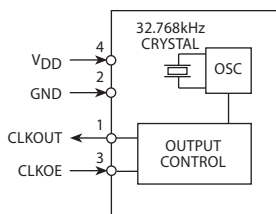


Features

-  **Ultra low power consumption**
-  **World's smallest LF oscillator**
-  **Tight frequency tolerance**
-  **Industrial and extended temperature ranges**
-  **High shock and vibration resistance**

Block Diagram



Enable / Disable Function

Input (pad 3)	Output (pad 1)
'1' level	Enabled
'0' level	Disabled

Note: Pad 3 should not be allowed to float.

Specifications

Parameters	Product	Option Codes
	OV7604C7	
Frequency:	32.7680kHz	■
Calibration tolerance: ( $V_{DD} = 3.0V$ )	$\pm 10ppm$	<input type="checkbox"/>
	$\pm 20ppm$	■
	Other	<input type="checkbox"/>
Turnover temperature ( $T_O$ ):	$+25^{\circ}C \pm 5^{\circ}C$	■
Frequency / temp coefficient:	$-0.035ppm/^{\circ}C^2 \pm 10\%$	■
Operating temperature range:	$-40$ to $+85^{\circ}C$	■
	$-40$ to $+125^{\circ}C$	<input type="checkbox"/>
Storage temperature range:	$-55$ to $+125^{\circ}C$	■
Supply voltage ( $V_{DD}$ ):	Operable from 1.2 ~ 5.5V	■
Supply current (backup mode):	0.3 $\mu$ A typ, 0.5 $\mu$ A max ( $V_{DD} = 3.0V$ , output disabled)	■
Logic levels:	'0' level = 0.4V max	■
	'1' level = $V_{DD} - 0.4V$ min	■
Waveform symmetry:	40:60 max @ 50% $V_{DD}$	■
Driving ability:	15pF CMOS	■
Voltage coefficient:	$\pm 1.5ppm/V$ max	■
Rise / fall time:	70ns max	■
Start up time:	500ms max @ $25^{\circ}C$	■
Enable / disable function:	Control via pad 3	■
Ageing:	$\pm 3ppm$ max first year @ $25^{\circ}C$	■
Shock and vibration resistance:	$\pm 5ppm$ , 5,000g, 0.3ms, sine	■
	$\pm 5ppm$ , 20g, 10.0 ~ 2,000Hz	■
Soldering condition:	Reflow, $260^{\circ}C$ , 20 sec max	■

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

Ordering Information

Product + option code  
 eg: **OV7604C7/B**  $\pm 20ppm$  (standard)  
 Option code X (eg OV7604C7/X) denotes a custom spec.

- ◆ Available on T&R - 1k or 3k pcs per reel.
- ◆ Refer to our website for T&R and soldering details.