



## Features

- ▶ High temperature operation up to 250°C
- ▶ High shock and vibration
- ▶ CMOS output
- ▶ Miniature SM package
- ▶ Excellent frequency stability

## Example Applications

- ▶ Oil and gas downhole instrumentation
- ▶ Rotary shaft sensors
- ▶ Underground boring tools
- ▶ Avionics

## Enable / Disable Function

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

## Specifications

GHTXOL: 3.3V supply

GHTXOS: 5.0V supply

Parameters	Variant		Option Codes
	L	S	
Frequency range:	32.768kHz 1.5 ~ 30.0MHz 1.5 ~ 50.0MHz	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
Overall stability: (see note 1)	±500ppm over +25 to +250°C	<input type="checkbox"/>	<input type="checkbox"/>
Temperature range:	-55 to +250°C	<input type="checkbox"/>	<input type="checkbox"/>
Storage temperature range:	-55 to +125°C	<input type="checkbox"/>	<input type="checkbox"/>
Supply voltage (V <sub>DD</sub> ):	+3.3V (±5%) +5.0V (±10%)	<input type="checkbox"/>	<input type="checkbox"/>
Driving ability:	15pF CMOS	<input type="checkbox"/>	<input type="checkbox"/>
Logic levels:	'0' level = 10%V <sub>DD</sub> max '1' level = 90%V <sub>DD</sub> min	<input type="checkbox"/>	<input type="checkbox"/>
Waveform symmetry:	40:60 @ 50%V <sub>DD</sub>	<input type="checkbox"/>	<input type="checkbox"/>
Startup time:	5ms max	<input type="checkbox"/>	<input type="checkbox"/>
Rise / fall time:	10ns max	<input type="checkbox"/>	<input type="checkbox"/>
Shock survival (@ 25°C):	30,000g, 0.5ms, ½ sine	<input type="checkbox"/>	<input type="checkbox"/>
Vibration survival:	20g, 10.0 ~ 2,000Hz, swept sine	<input type="checkbox"/>	<input type="checkbox"/>
Enable / disable function:	None Tristate (control via pad 1)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

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

## Ordering Information

Product name + variant + option codes + frequency

eg: GHTXOL 24.00MHz 3.3V supply, no E/D

GHTXOS/E 20.0MHz 5.0V supply, E/D function

Option code X (eg GHTXOL/X) denotes a custom spec.

- ♦ 1: Relative to nominal frequency
- ♦ 2: Expected life at 250°C is 1000 hours minimum
- ♦ 3: A bypass capacitor 0.1µF should be connected as close as possible to supply and ground pads