



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

■ 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