

# GXO-L31J

# 2.5V LVDS Oscillator for High Speed Data Transfer

# • Differential outputs

- RMS phase jitter 0.3ps
- Low current consumption (20mA max.)
- Multiplier-free design
- Enable / disable tristate function



| CONFIGURABLE OPTIONS        |             |
|-----------------------------|-------------|
| Parameter                   | Option Code |
| Frequency                   |             |
| Frequency stability         |             |
| * see note below            |             |
| Any                         |             |
| ±100ppm                     |             |
| ±50ppm                      | В           |
| ±25ppm (<160MHz)            | А           |
| Operating temperature range |             |
| Any                         |             |
| -10 to +70°C                |             |
| -40 to +85°C                | Ι           |

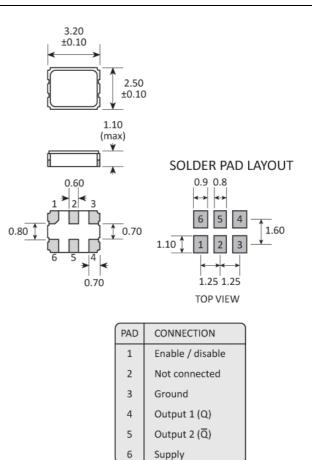
<sup>\*</sup> Frequency stability is inclusive of calibration @ 25°C, operating temperature range, supply voltage change and load change.



#### SPECIFICATIONS

| Frequency range             | 40.0 ~ 60.0MHz (fundamental)<br>60.0 ~ 160MHz (3rd OT)<br>160 ~ 250MHz (inverted mesa) |
|-----------------------------|--|
| Dimensions                  | 3.2 x 2.5 x 1.1mm  |
| Storage                     | -40 to +85°C   |
| temperature range           |  |
| Supply voltage              | +2.5V (±5%)  |
| (V <sub>DD</sub> )          |  |
| Supply current              | 20mA max   |
| Output                      | LVDS   |
| Offset voltage              | 1.25V typ  |
| Differential output voltage | 0.247 ~ 0.454V (0.33V typ)   |
| Output load                 | 100Ω   |
| Waveform                    | 45:55 max @ 50%V <sub>P-P</sub>  |
| symmetry                    |  |
| Rise / fall time            | 0.4ns max (20 ~ 80%V <sub>P-P</sub> )  |
| Enable / disable            | Tristate (control via pad 1)   |
| function                    |  |
| Phase jitter RMS            | 1ps max (0.3ps typ), 12kHz~20MHz   |
|                             |  |

#### **PACKAGE DRAWING**



Dimensions in mm

# **ORDERING INFORMATION**

To request a quotation for the GXO-L31J please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at sales@golledge.com.

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

# **ENABLE / DISABLE FUNCTION**

| Input (pad<br>1 <sup>*</sup> )       | Output 1<br>(pad 4)  | Output 2<br>(pad 5) |  |  |
|--------------------------------------|----------------------|---------------------|--|--|
| Open                                 | Enabled              | Enabled             |  |  |
| '1' level (≥0.7<br>V <sub>DD</sub> ) | Enabled              | Enabled             |  |  |
| '0' level (≤0.3<br>V <sub>DD</sub> ) | High<br>Impedanceive | High Impedance      |  |  |

\*Enable / Disable function can be on pad 2 on request.



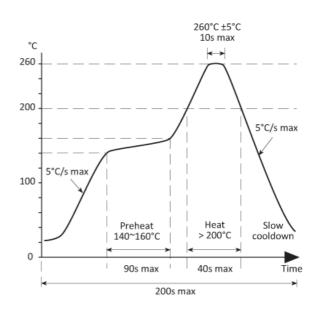
#### MARKING

FREQUENCY DC • PARTNO  Pin 1 Marking type: Laser

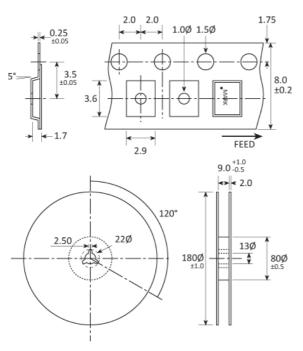
DC = Date Code in YM, eg. "GF" = Jun 2017

| _ |   |     |     |     |     |     |     |     |     |     |     |     |     |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|   |   | Α   | В   | С   | D   | Е   | F   | G   | н   | J   | К   | L   | м   |
|   | Y | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 0   |     |     |
|   | м | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

### **SOLDERING PROFILE**



#### **TAPE & REEL SPECIFICATION**



Dimensions in mm

# **HANDLING & STORAGE**



Human Body Model (HBM) 1A (250V to <500V)

Moisture Sensitivity Level (MSL): 1 (or not applicable)



# CONSTRUCTION

Ceramic body with gold-plated pads Metal lid, seam sealed

#### COMPLIANCE



🗭 Lead-free (< 0.1% by weight )



RoHS compliant with no exemptions. See our

Réach

REACH compliant. See our statement



AulTa Sn W Free of conflict minerals. See our declaration



Free of Halogens. See our declaration

Free of Ozone-depleting substances. <u>See our</u> declaration