

# GXO-3306G

# 3225 Package Ultra-Low Jitter 1.8V

# **Oscillator**

- Excellent phase noise & jitter characteristics
- Enable / disable tristate function
- Small and medium quantities also available



| CONFIGURABLE OPTIONS |             |
|----------------------|-------------|
| Parameter            | Option Code |
| Frequency            |             |
| Frequency stability  |             |
| * see note below     |             |
| Any                  |             |
| ±25ppm               | А           |
| ±50ppm               | В           |

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



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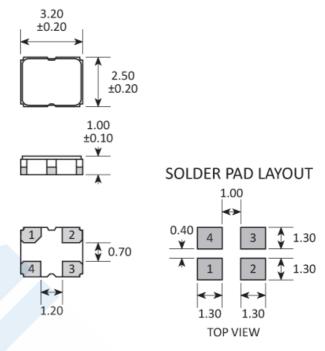


# **SPECIFICATIONS**

| Frequency range                   | 20.0 ~ 50.0MHz   |  |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|--|--|
| Dimensions                        | 3.2 x 2.5 x 1.1mm  |  |  |  |  |  |  |
| Operating temperature range       | -40 to +85°C   |  |  |  |  |  |  |
| Storage temperature range         | -55 to +125°C  |  |  |  |  |  |  |
| Supply voltage (V <sub>DD</sub> ) | +1.8V (±5%)  |  |  |  |  |  |  |
| Supply current                    | 7mA max  |  |  |  |  |  |  |
| Logic levels                      | '0' level = 20%V <sub>DD</sub> max<br>'1' level = 80%V <sub>DD</sub> min |  |  |  |  |  |  |
| Start up time                     | 10ms max   |  |  |  |  |  |  |
| Waveform symmetry                 | 40:60 max @ 50%V <sub>DD</sub>   |  |  |  |  |  |  |
| Driving ability                   | 15pF CMOS  |  |  |  |  |  |  |
| Rise / fall time                  | 5ns max  |  |  |  |  |  |  |
| Enable / disable function         | Tristate (control via pad 1)   |  |  |  |  |  |  |
| Phase jitter RMS                  | 0.04ps typ (12kHz ~ 5.0MHz)  |  |  |  |  |  |  |
| * see note below                  |  |  |  |  |  |  |  |
| Phase noise (typ @                | -101dBc/Hz @ 10Hz  |  |  |  |  |  |  |
| 24.576MHz)                        | -132dBc/Hz @ 100Hz   |  |  |  |  |  |  |
|                                   | -155dBc/Hz @ 1kHz  |  |  |  |  |  |  |
|                                   | -166dBc/Hz @ 10kHz   |  |  |  |  |  |  |
|                                   | -174dBc/Hz @ 100kHz  |  |  |  |  |  |  |
|                                   | -175dBc/Hz @ 1MHz  |  |  |  |  |  |  |
|                                   | -175dBc/Hz @ 5MHz  |  |  |  |  |  |  |

<sup>\*</sup> For ultimate performance, a high frequency decoupling capacitor should be connected between supply and ground as close to the oscillator supply pad as possible. Low frequency decoupling should be placed next to the supply source.

# **PACKAGE DRAWING**



| PAD | CONNECTION       |
|-----|------------------|
| 1   | Enable / disable |
| 2   | Ground           |
| 3   | Output           |
| 4   | Supply           |

Dimensions in mm



# **ORDERING INFORMATION**

To request a quotation for the GXO-3306G 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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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

# **MARKING**

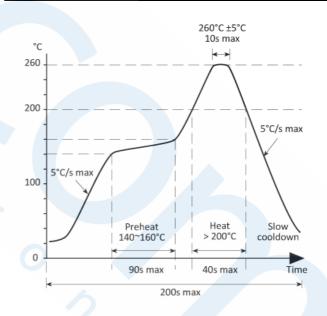


Marking type: Laser

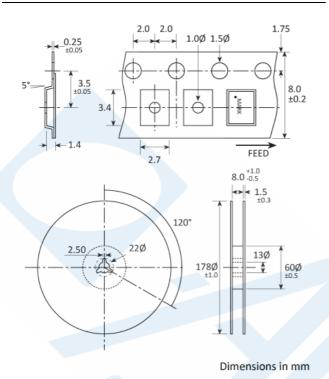
#### DC = Date Code in YM, eg. "GF" = Jun 2017

|   | Α   | В   | С   | D   | E   | F   | G   | Н   | J   | K   | L   | M   |  |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Υ | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 0   |     |     |  |
| M | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |

# **SOLDERING PROFILE**



# **TAPE & REEL SPECIFICATION**



# **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

declaration



REACH compliant. See our statement



Free of conflict minerals. See our declaration



Free of Halogens. See our declaration



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

declaration



# OTHER INFORMATION

#### **About Golledge**

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

#### Come and visit

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations). To take advantage of our highly praised service get in touch with us today.



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