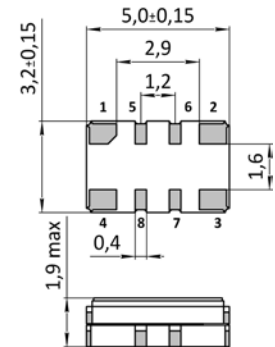
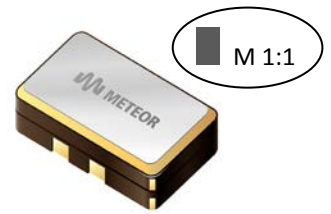


**Electrical Performance**

| Parameter   | Units     | Value  |                      |
|---|-----------|--|----------------------|
|   |           | GK323-1-TK (TCXO)  | GK323-1-UTK (VCTCXO) |
| Frequency range   | MHz       | 16 to 45   |                      |
| Frequency tolerance   | ppm       | -  | ±1.5                 |
| Temperature range   | °C (code) | -10 ... 60 (A)<br>-30 ... 60 (B)<br>-40 ... 70 (V)<br>-40 ... 85 (C) |                      |
| Output Level:<br>- Output waveform (code)<br>- Output voltage<br>- Output Level (Sine Wave) | V         | Sine wave (S)<br>0.8 min   |                      |
| Phase Noise, max:   | dBc/Hz    | @ 10 Hz -80<br>@ 100 Hz -110<br>@ 1 kHz -130<br>@ 10 kHz -143        |                      |
| Tuning Range, $U_0 = (0 \dots 0.6 \dots \text{Up})$ V                                       | ppm       | -  | -3 ... 5             |
| Stability:<br>- Power Supply, ±5% change<br>- Load :  | ppm       | ±0.2 max   |                      |
|   | ppm       | ±0.2 max   |                      |
| Supply voltage ( $U_p$ ):   | V         | 3.3±5%; 5.0±5%   |                      |
| Supply Current:   | mA        | 6 max  |                      |
| 16 - 20 MHz   | mA        | 8.5 max  |                      |
| 20 - 45 MHz   |           |  |                      |


 Ceramic package with metal lid  
 Plating: Ni+Au(0,3...1 µm)

**Pinout**

|            |   |
|------------|---|
| 1          | TCXO - Ground<br>VCTCXO - Control Voltage |
| 2          | Ground                                    |
| 3          | Output                                    |
| 4          | Supply Voltage                            |
| 5, 6, 7, 8 | Make No Connection                        |

**Frequency Stability (Over Operating Temperature range)**

For GK323-1-TK (offset from nominal freq. including initial accuracy):

| Temperature range, °C (code) | Stability, ppm (code) |           |            |           |           |           |           |           |           |
|------------------------------|-----------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                              | ±1.3 (A1)             | ±1.5 (B1) | ±1.75 (V1) | ±2.0 (G1) | ±2.5 (D1) | ±3.0 (E1) | ±3.5 (J1) | ±4.0 (I1) | ±6.0 (K1) |
| -10 ... 60 (A)               | +                     | +         | +          | +         | +         | +         | +         | +         | +         |
| -30 ... 60 (B)               |                       | +         | +          | +         | +         | +         | +         | +         | +         |
| -40 ... 70 (V)               |                       |           | +          | +         | +         | +         | +         | +         | +         |
| -40 ... 85 (C)               |                       |           |            | +         | +         | +         | +         | +         | +         |

For GK323-1-UTK (offset from average freq. in range operating temp.):

| Temperature range, °C (code) | Stability, ppm (code) |          |           |          |          |          |          |          |          |
|------------------------------|-----------------------|----------|-----------|----------|----------|----------|----------|----------|----------|
|                              | ±0.3 (A)              | ±0.5 (B) | ±0.75 (V) | ±1.0 (G) | ±1.5 (D) | ±2.0 (E) | ±2.5 (J) | ±3.0 (I) | ±5.0 (K) |
| -10 ... 60 (A)               | +                     | +        | +         | +        | +        | +        | +        | +        | +        |
| -30 ... 60 (B)               |                       | +        | +         | +        | +        | +        | +        | +        | +        |
| -40 ... 70 (V)               |                       |          | +         | +        | +        | +        | +        | +        | +        |
| -40 ... 85 (C)               |                       |          |           | +        | +        |          | +        | +        | +        |

**Environmental**
**Shock:**

test Ea. 1500 gn acceleration for 0.1-0.2 ms duration, half sine pulse, 2 shocks in each direction along three mutually perpendicular axes at octave per minute

**Vibration:**

test Fc. 50Hz 2.0 mm displacement, 1-2000 Hz at 20 gn, 8 hours in each of three mutually perpendicular axes at 1 octave per minute

**Storage temperature:**

-40°C to 85°C

**Long Term Frequency Stability**

- ±5 ppm max for 20 years (+60 °C)
- ±2 ppm max in 1st year, frequency >20 MHz
- ±1 ppm max in 1st year, frequency ≤20 MHz

**Ordering Information**
**TCXO GK323-1-TK-CG1-40M-3.3**

 Product:  
 GK323-1-TK  
 GK323-1-UTK

 Temperature range:  
 A(-10...60); B(-30...60);  
 V(-40...70); C(-40...85);

 Frequency Stability Over Temperature range:  
 For GK323-1-TK: A1 (±1.3); B1 (±1.5); V1 (±1.75);  
 G1 (±2); D1 (±2.5); E1(±3); J1(±3.5); I1(±4); K1(±6)  
 For GK323-1-UTK: A (±0.3); B (±0.5); V (±0.75);  
 G (±1); D (±1.5); E (±2); J (±2.5); I (±3); K (±5)

 Frequency  
 in MHz

 Voltage  
 Options  
 3.3 (3.3V)  
 5 (5V)