

Typical Applications

Base Stations
Test Equipment
Synthesizers

Features

AT-Cut Crystal
Dual-inline oscillator
Hermetically Sealed Package
Surface Mount Option



Frequency range

30 MHz – 90 MHz

Standard frequencies

30.72; 32.768; 50; 68.768MHz

Frequency stabilities

| Parameter | Code II | Frequency stability | Operating temp range |
|---------------------------------|-----------|---------------------|----------------------|
| vs. operating temperature range | 20 | ± 100 ppm | -55 ... +125°C |
| | 21 | ± 50 ppm | |
| | 22 | ± 50 ppm | |
| | 24 | ± 25 ppm | -55 ... +105°C |
| | 34 | ± 15 ppm | |
| | 32 | ± 10 ppm | -40 ... +90°C |
| | 10 | ± 50 ppm | -30 ... +80°C |
| | 12 | ± 20 ppm | |
| | 14 | ± 10 ppm | |
| | 16 | ± 7.5 ppm | |
| 18 | ± 5.0 ppm | | |
| 10 | ± 50 ppm | -20 ... +70°C | |
| 12 | ± 20 ppm | | |
| 14 | ± 10 ppm | | |
| 16 | ± 7.5 ppm | | |
| 18 | ± 5.0 ppm | | |
| Parameter | Code I | Frequency stability | Condition |
| Initial tolerance | 01 | ± 100 ppm | @ 25°C |
| | 02 | ± 50 ppm | |
| | 03 | ± 20 ppm | |
| | 05 | ± 10 ppm | |
| | 07 | ± 5 ppm | |

RF output

| Parameter | Value | Condition |
|--------------------|---------|---|
| Signal | LS-TTL | 30 MHz to 40 MHz ≥ 40 MHz @ 1.5 V |
| Fan out | 10 | |
| Rise and Fall time | < 10 ns | |
| | < 6 ns | |
| Duty cycle | 40/60 % | |

Supply voltage

| Parameter | Value | Condition |
|---------------------|-------------|-----------|
| Supply voltage (Vs) | 5.0 V ± 5 % | |
| Current consumption | < 40 mA | |

Additional parameters

| Parameter | Value | Condition | |
|-------------|--------------|-----------|--------|
| Phase Noise | <-80 dBc/Hz | 10 Hz | Note 1 |
| | <-110 dBc/Hz | 100 Hz | |
| | <-135 dBc/Hz | 1 kHz | |
| | <-145 dBc/Hz | 10 kHz | |
| | <-150 dBc/Hz | 100 kHz | |
| Weight | < 6 g | | |

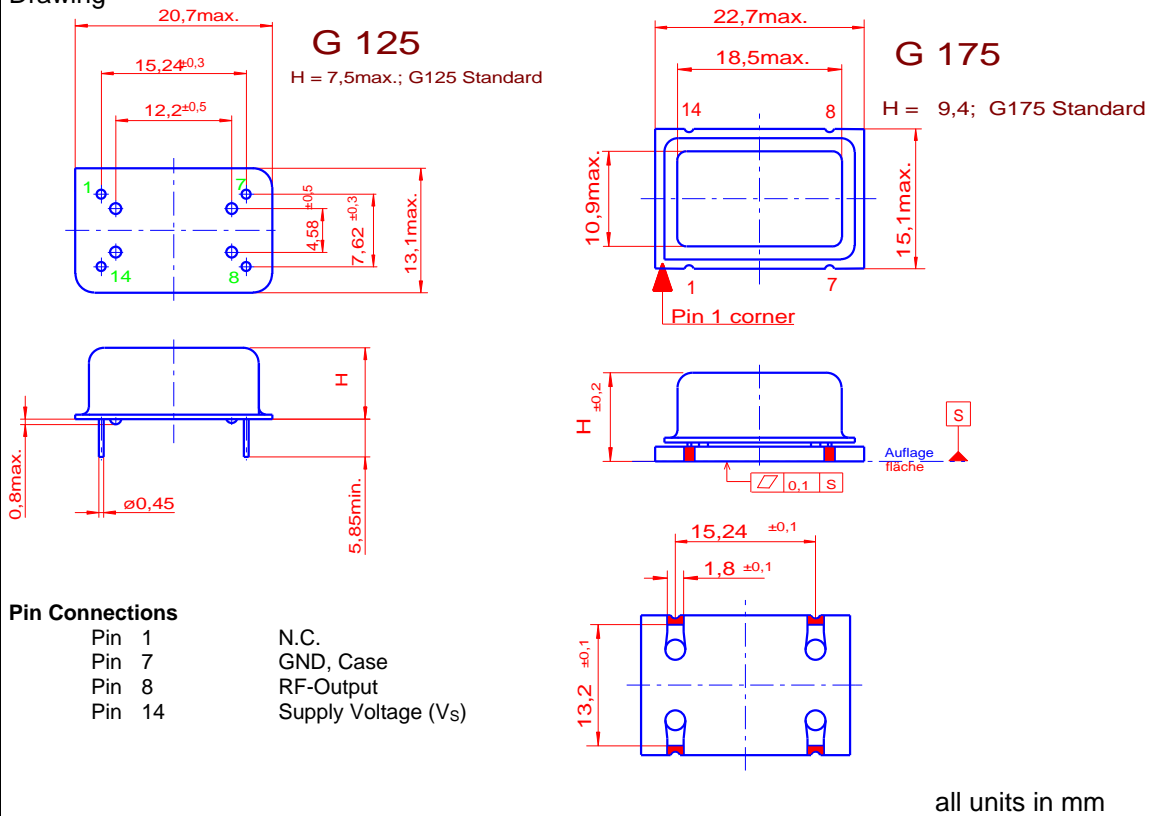
Additional Parameters

| Parameter | Value | Condition |
|----------------------------|--------------------------|---|
| Operable temperature range | -55 ... +105°C | |
| Storage temperature range | -60 ... +125°C | |
| Processing & Packing | handling&processing note | |
| Screening | Option I | Condition |
| | S | Screening MIL STD 883 C method 5008.2 class B |
| | B | Screening MIL-O-55310, Class B |
| | C | Screening MIL-O-55310, Class C |

Enclosure

| Type | Option II | Case | Condition |
|------|--------------|------|-----------|
| | Blank | G125 | |
| | A | G175 | |

Drawing



| Ordering Code | Code I | Code II | Option I | Option II | |
|-----------------|----------------------|---------------------|-----------|-----------|-----------|
| Model | Adjustment tolerance | Frequency Stability | Screening | Case | Frequency |
| Example: TQDILP | 05. | 14. | | A | 30M00000 |
| Order: TQDILP | | | | | |

Note

1 Typical values @ 30 MHz

Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)
Subject to technical modification; Not all options and codes are available at all Frequencies