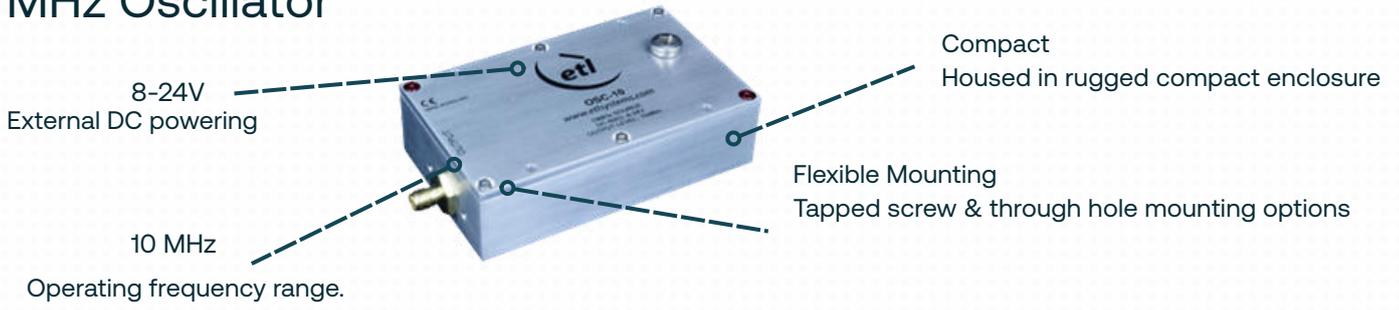


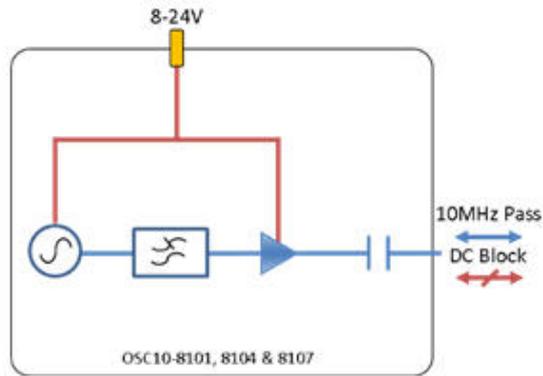


# 10 MHz Oscillator



| RF Parameters                        |                         |            |                              |                    |                 |
|--------------------------------------|-------------------------|------------|------------------------------|--------------------|-----------------|
|                                      | S5S5                    | N5N5       | B5B5                         | B7B7               | F7F7            |
| Frequency Range                      | 10 MHz                  |            |                              |                    |                 |
| RF Connectors                        | 50Ω SMA                 | 50Ω N-Type | 50Ω BNC                      | 75Ω BNC            | 75Ω F-Type      |
| Output Level (dBm)                   | 5 ± 2.5                 |            |                              |                    |                 |
| Return Loss (dB)                     | Typical                 | 18         |                              | 15                 |                 |
|                                      | Minimum                 | 10         |                              | 8                  |                 |
| Phase Noise Characteristics (dBc/Hz) |                         |            | 10MHz Source Characteristics |                    |                 |
| 1Hz                                  | <-85                    |            | Frequency Setting            |                    | 10±0.000001 MHz |
| 10Hz                                 | <-115                   |            | Output Type                  |                    | Sinewave        |
| 100Hz                                | <-140                   |            | Harmonic Rejection           | 2nd                | >60 dB          |
| 1000Hz                               | <-150                   |            |                              | 3rd                | >50 dB          |
| 10000Hz                              | <-155                   |            |                              | 4th                | >60 dB          |
|                                      |                         |            |                              | 5th                | >60 dB          |
| Oscillator Characteristics           |                         |            |                              |                    |                 |
| Frequency Stability                  |                         |            |                              |                    |                 |
| Over temperature*                    | < ± 3x10 <sup>-8</sup>  |            |                              |                    |                 |
| Short Term Stability (per second)    | < ± 1x10 <sup>-11</sup> |            |                              |                    |                 |
| Load change                          | < ± 5x10 <sup>-9</sup>  |            |                              |                    |                 |
| Power Supply Variations              | < ± 5x10 <sup>-9</sup>  |            |                              |                    |                 |
| Stability With Aging                 |                         |            |                              |                    |                 |
| Per Day                              | < ± 2x10 <sup>-9</sup>  |            |                              |                    |                 |
| Per Year                             | < ± 5x10 <sup>-7</sup>  |            |                              |                    |                 |
| Environmental                        |                         |            | Max Operating Parameters     |                    |                 |
| Operating Temperature                | 0°C to +55°C            |            | Input RF Power               | +16 dBm (40mW)     |                 |
| Storage Temperature                  | -20°C to +75°C          |            | DC Voltage                   | 26V on Bias Port   |                 |
| Location                             | Indoor use Only         |            | DC Consumption               | 1000mA on start-up |                 |
| Humidity Max                         | 85% non-condensing      |            |                              | 400mA Steady State |                 |
| Altitude Max                         | 10,000 feet             |            |                              |                    |                 |

## Diagram



## Physical Dimensions (mm)

