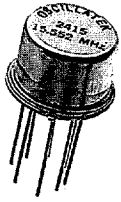


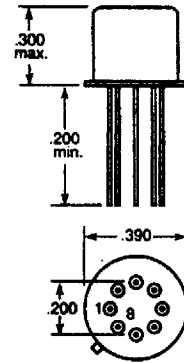
QPL Clock Oscillators

M55310/09



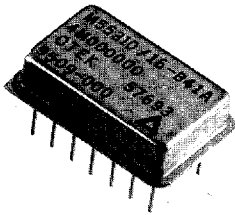
Features

- QPL DESC approved for a variety of class B devices.
- Frequency range from 400 kHz to 30 MHz
- TTL



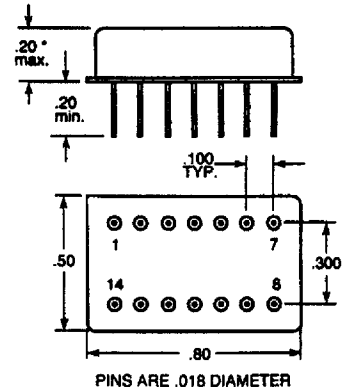
Note: dimensions in inches

M55310/14 M55310/16 M55310/17



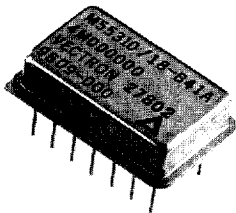
Features

- QPL DESC approved for a variety of class B and class S devices.
- Frequency range from 0.1 Hz to 60 MHz
- TTL



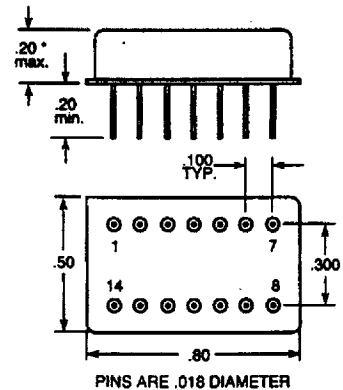
Note: dimensions in inches

M55310/18 M55310/25 M55310/26



Features

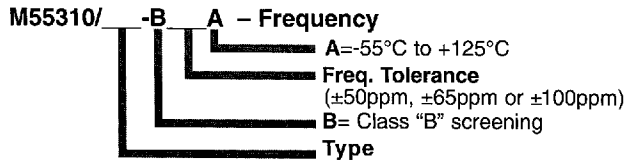
- QPL DESC approved for a variety of class B devices.
- Frequency range from 250 Hz to 175 MHz
- HCMOS and ECL outputs



Note: dimensions in inches

QPL Clock Oscillators

QPL Part Numbering



Specifications

VI is an approved source of MIL-O-55310 hybrid oscillators and is currently qualified to the following "slash" numbers:

| Type | Output | Package |
|-----------|--------|--------------|
| M55310/09 | TTL | TO-5 |
| M55310/14 | TTL | 14 pin DIP |
| M55310/16 | TTL | 14 pin DIP |
| M55310/17 | TTL | 14 pin DIP |
| M55310/18 | CMOS | 14 pin DIP |
| M55310/25 | ECL | 4/14 pin DIP |
| M55310/26 | HCMOS | 4/14 pin DIP |

VI provides QPL parts with 100% Class "B" screening:

- | | |
|-------------------------|----------------------------------|
| 1 Internal Visual | 5 Seal Test |
| 2 Stabilization Bake | 6 Electrical Test at +23°C |
| 3 Temperature Cycling | 7 160 Hour Burn-in Load |
| 4 Constant Acceleration | 8 Electrical Test vs Temperature |

The current issue of the appropriate military slash sheet should be consulted for further information on QPL products. Data on the current issue of the slash sheet may supercede data on this page.

Consult factory for test details and current DESC specifications.

| Type | Frequency Range | Freq. Tolerance ppm | | Pinouts | | | |
|------|-------------------|---------------------|------|---------|-----|-----|-------|
| | | ±50 | ±100 | +5V | Gnd | Out | Gate |
| 09 | 400 KHz - 9 MHz | 01 | 05 | 8 | 4 | 5 | na |
| 09 | 9 MHz - 25 MHz | 11 | 15 | 8 | 4 | 5 | na |
| 09 | 25 MHz - 30 MHz | 21 | 25 | 8 | 4 | 5 | na |
| 14 | 0.1 Hz - 1 KHz | 01 | na | 4 | 7 | 5 | na |
| 14 | 1 KHz - 150 KHz | 02 | na | 4 | 7 | 5 | na |
| 14 | 150 KHz - 300 KHz | 03 | na | 4 | 7 | 5 | na |
| 14 | 300 KHz - 600 KHz | 04 | na | 4 | 7 | 5 | na |
| 14 | 600 KHz - 2.5 MHz | 05 | na | 4 | 7 | 5 | na |
| 14 | 2.5 MHz - 5.0 MHz | 06 | na | 4 | 7 | 5 | na |
| 14 | 5.0 MHz - 10 MHz | 07 | na | 4 | 7 | 5 | na |
| 14 | 10 MHz - 15 MHz | 08 | na | 4 | 7 | 5 | na |
| 14 | 15 MHz - 25 MHz | 09 | na | 4 | 7 | 5 | na |
| 16 | 0.1 Hz - 250 Hz | 01 | 04 | 14 | 7 | 8 | na |
| 16 | 250 Hz - 150 KHz | 11 | 14 | 14 | 7 | 8 | na |
| 16 | 159 KHz - 5.0 MHz | 21 | 24 | 14 | 7 | 8 | na |
| 16 | 4.0 MHz - 20 MHz | 31 | 34 | 14 | 7 | 8 | na |
| 16 | 20 MHz - 60 MHz | 41 | 44 | 14 | 7 | 8 | na |
| 17 | 250 KHz - 5 MHz | 01 | 04 | 14 | 7 | 8 | pin 9 |
| 17 | 4.0 MHz - 20 MHz | 11 | 14 | 14 | 7 | 8 | pin 9 |
| 17 | 20 MHz - 50 MHz | 21 | 24 | 14 | 7 | 8 | pin 9 |

| Type | Frequency Range | Freq. Tolerance ppm | | | Pinouts | | | |
|------|-------------------|---------------------|----------------|----------------|---------|-----|-----|------|
| | | ±50 | ±65 | ±100 | Vcc | Gnd | Out | Gate |
| 18 | 250 Hz - 8 MHz | 01 | — | 02 | 14 | 7 | 8 | na |
| 18 | 250 Hz - 8 MHz | 11 | — | 12 | 14 | 7 | 8 | na |
| 18 | 250 Hz - 8 MHz | 21 | — | 22 | 14 | 7 | 8 | na |
| 18 | 250 Hz - 8 MHz | 31 | — | 32 | 14 | 7 | 8 | na |
| 18 | 250 Hz - 5 MHz | 41 | — | 42 | 14 | 7 | 8 | na |
| 25 | 25 MHz - 100 MHz | — | 02, 03, 06, 07 | 10, 11, 14, 15 | 7 | 14 | 8 | na |
| 25 | 100 MHz - 125 MHz | — | 32, 33, 36, 37 | 40, 41, 44, 45 | 7 | 14 | 8 | na |
| 25 | 125 MHz - 175 MHz | — | 62, 63, 66, 67 | 70, 71, 74, 75 | 7 | 14 | 8 | na |
| 26 | 0.01 MHz - 1 MHz | — | 02, 03 | 06, 07 | 14 | 7 | 8 | na |
| 26 | 1 MHz - 4 MHz | — | 22, 23 | 26, 27 | 14 | 7 | 8 | na |
| 26 | 4 MHz - 20 MHz | — | 32, 33 | 36, 37 | 14 | 7 | 8 | na |
| 26 | 20 MHz - 35 MHz | — | 42, 43 | 46, 47 | 14 | 7 | 8 | na |
| 26 | 35 MHz - 50 MHz | — | 52, 53 | 56, 57 | 14 | 7 | 8 | na |
| 26 | 50 MHz - 65 MHz | — | 62, 63 | 66, 67 | 14 | 7 | 8 | na |

The above table is a summary of the -55°C to +125°C options offered by VI. Other temperature ranges and stabilities may be available. Stability tolerance is based on the +23°C calibration tolerance of ±15 PPM for ±50PPM vs Temperature.