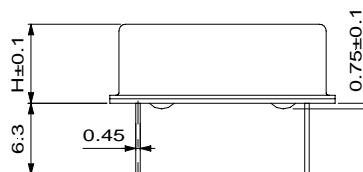
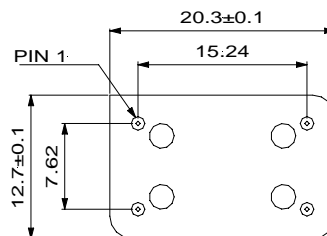


DIL 14 MINIATURE OCXO TYPES DFO 14-KH (5 V) & DFO 14-LH (3.3 V)

| FEATURES |
|--------------------------------|
| 10 to 30 MHz |
| Small size and tight stability |
| APPLICATIONS |
| Instrumentation, reference |

| Function | DFO 14 |
|--------------------|--------|
| N.C. or V. control | 1 |
| GND | 7 |
| Output | 8 |
| Vcc | 14 |



| TYPE | DFO 14-KH | DFO 14-LH |
|----------------------|------------------------------|-----------|
| Frequency Range | 10 to 30 MHz | |
| Standard frequencies | 12.8, 16.384, 19.44 & 20 MHz | |

| ELECTRICAL SPECIFICATIONS | DFO 14-KH | DFO 14-LH |
|-----------------------------------|-------------------------------------|-------------------------------------|
| supply voltage | 5 V ± 5 % | 3.3 V ± 5 % |
| supply current (no load) @ 25°C | ≤ 250 mA | ≤ 300 mA |
| supply current during warm up | ≤ 500 mA | ≤ 800 mA |
| output load | HCMOS 15 pF or 2 TTL | HCMOS 15 pF or 2 TTL |
| duty cycle @ 2.5 V | 40/60...60/40 % | 40/60...60/40 % |
| rise & fall times (10 to 90%) | ≤ 10 ns | ≤ 10 ns |
| high/low levels | ≥ 4.5 V / ≤ 0.5 V | ≥ 2.7 V / ≤ 0.5 V |
| SSB phase noise (1 Hz BW) @ 10 Hz | -95 dBc/Hz | -95 dBc/Hz |
| (typical @ 12.8MHz) @ 100 Hz | -120 dBc/Hz | -120 dBc/Hz |
| @ 1kHz | -140 dBc/Hz | -140 dBc/Hz |
| @ 10 kHz | -145 dBc/Hz | -145 dBc/Hz |
| @ 100kHz | -150 dBc/Hz | -150 dBc/Hz |
| warm up time to reach ≤ 1 x 10E-7 | ≤ 5 min @ 25°C ref @ 1 hr frequency | ≤ 5 min @ 25°C ref @ 1 hr frequency |

| FREQUENCY STABILITY | | | detailed tolerances | | | | |
|---------------------------------|-------------------|------------|---------------------------------------|---------------------------|------------------------------|--------------------------|-----------------------------|
| type | temperature range | model code | stability versus : | | | short term | Calibration @ 25°C |
| | | | temperature | ageing/day | ageing/ 1 st year | | |
| DFO 14 | -20 to 70°C | C1727 | ≤ ± 1 x 10 ^{E-7} | ≤ 1.5 x 10 ^{E-8} | ≤ 2 x 10 ^{E-7} | ≤ 1 x 10 ^{E-10} | ≤ ± 0.5 x 10 ^{E-6} |
| | -20 to 70°C | C1757 | ≤ ± 1 x 10 ^{E-7} | | ≤ 5 x 10 ^{E-7} | | |
| | -20 to 70°C | C2757 | ≤ ± 2 x 10 ^{E-7} | | ≤ 5 x 10 ^{E-7} | | |
| stability versus supply voltage | | | ≤ 1 x 10 ^{E-8} for Vcc ± 5 % | | | | |

| OPTIONS | CODE | | |
|------------------|------|--|--|
| external voltage | V | 2.5 V ± 2.25 V ≥ ± 2 ppm, positive slope | 1.65 V ± 1.5 V ≥ ± 2 ppm, positive slope |

| ORDERING CODE | type + option code + frequency + model code + voltage value |
|---------------|---|
| Example | DFO 14-LH 20 MHz C1727 |