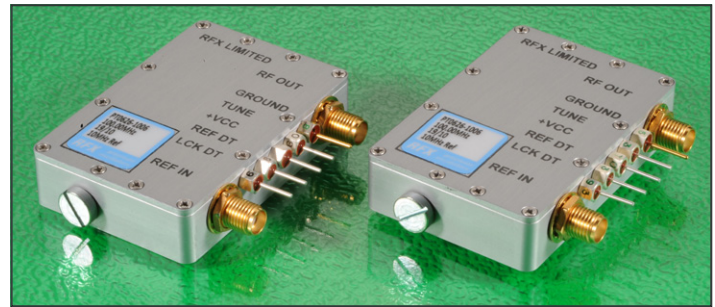


1MHz to 2.4GHz PLL hybrid OCXO module phase locked to external 10.00MHz precision reference

sine wave output, 0dBm into 50Ω

Hermetically sealed case, 13mm height

h.f. Communications equipment, system synchronisation, precision reference



Generic specification:

Stability:

OCXO holdover from $\pm 0.005\text{ppm}(0 +50)^\circ\text{C}$, custom specified dependent upon input reference accuracy
 locked 10.00MHz, 0dBm, as standard, $+2\text{dBm} \pm 6\text{dB}$
 input reference $\pm 0.002\text{ppm max.}$, $V_{cc} \pm 5\%$
 against V_{cc} change $\pm 0.002\text{ppm max.}$, load $\pm 10\%$
 against load change $\pm 0.003\text{ppm max./day}$ after 30 days continuous operation
 ageing short term from $\pm 0.1\text{ppm max./year}$ after 30 days continuous operation
 ageing long term $\pm 1.0\text{ppm min.}$, no reference
 electronic trim

Output:

sine wave, $+0\text{dBm min.}$
 harmonics -25dBc

Power supplies:

supply voltage $+5\text{Vd.c.} \pm 5\%$
 start up current 560mA max.
 quiescent current 270mA max. at $+25^\circ\text{C}$
 warm up time 4 minutes max. to within $\pm 0.1\text{ppm}$ of nominal

Typical free run phase noise:

single sideband, -105dBc/Hz , $f_o + 10\text{Hz}$
 1Hz bandwidth -120dBc/Hz , $f_o + 100\text{Hz}$
 -135dBc/Hz , $f_o + 1\text{kHz}$
 -155dBc/Hz , $f_o + 10\text{kHz}$
 phase noise at lock dependent on reference input

Jitter:

$< 1\text{ps}$

Temperature:

operating range $(0 +50)^\circ\text{C}$
 storage range $(-40 +125)^\circ\text{C}$

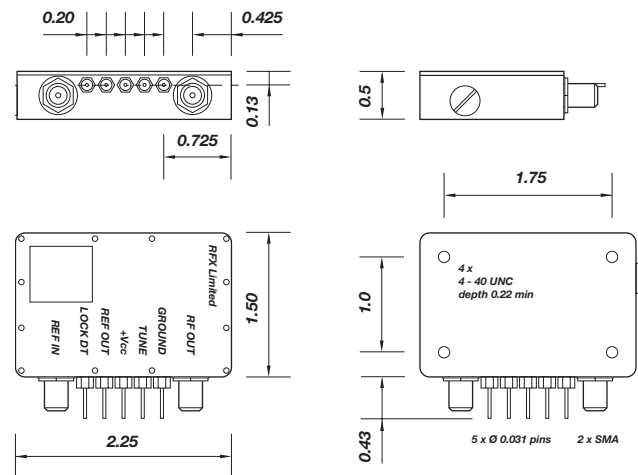
Insulation resistance:

500MΩ min., 100Vd.c.

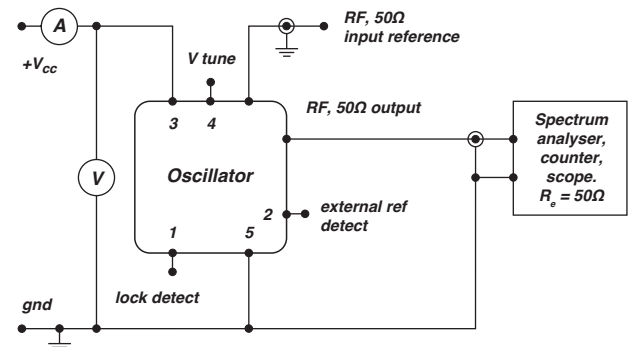
Marking:

part number, frequency, date code, serial number

Dimensions(inches):



Test circuit:



Lock detect levels:
 CMOS: low; no lock, high; lock

External ref detect levels:
 CMOS: low; no reference, high; ref detected

