

Low phase noise frequency standard, frequency range 1MHz to 1GHz

(-40 +85)°C operating temperature

sine wave output, 0dBm into 50Ω, harmonics -25dBc

Hermetically sealed case, 13mm height

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



Generic specification:

Stability:

over temperature from ± 0.01 ppm(-40 +85)°C, custom specified
 against V_{cc} change ± 0.001 ppm max., $V_{cc} \pm 5\%$
 against load change ± 0.001 ppm max., load $\pm 10\%$
 ageing short term ± 0.0003 ppm max./day after 30 days continuous operation
 ageing long term from ± 0.12 ppm max./year after 30 days continuous operation
 short term stability, 1sec. ± 0.0005 ppm max.
 electronic trim ± 1.0 ppm typical
 ± 2.5 Vd.c. ± 2.5 V, 10% linearity

Output:

sine wave, +0dBm min. into 50Ω, harmonics -25dBc

Power supplies:

supply voltage +12Vd.c. $\pm 5\%$
 start up current 350mA max.
 quiescent current 150mA max. at +25°C
 warm up time 5 minutes max. to within ± 0.1 ppm of nominal

Phase noise:

single sideband, -115dBc/Hz, $f_o + 10$ Hz
 1Hz bandwidth -142dBc/Hz, $f_o + 100$ Hz
 -155dBc/Hz, $f_o + 1$ kHz
 -160dBc/Hz, $f_o + 10$ kHz

Jitter:

<1ps

Temperature:

operating range (-40 +85)°C
 storage range (-55 +125)°C

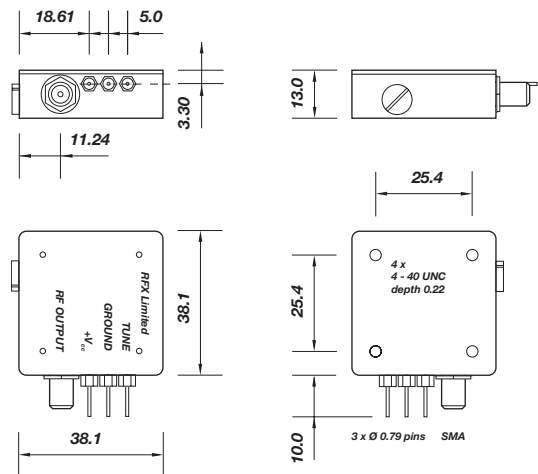
Insulation resistance:

500MΩ min., 100Vd.c.

Marking:

part number, frequency, date code, serial number

Dimensions(mm):



Test circuit:

