## OUTPUT

## Frequency

(1) 10 MHz
(1) 100 MHz
(1) 1 GHz

Level
+10 dBm minimum into 50 ohms, each frequency STABILITY
Aging
$1 \times 10^{-9}$ per day after 30 days operating, typica
Phase Noise L(f)

|  | $\mathbf{1 0 ~ M H z}$ | $\mathbf{1 0 0} \mathbf{M H z}$ | $\mathbf{1} \mathbf{G H z}$ |
| :--- | :---: | :---: | :---: |
| $\mathbf{1 0 H z}$ | -140 | -115 | -95 |
| 100 Hz | -160 | -135 | -113 |
| 1 kHz | -169 | -155 | -133 |
| 10 kHz | -171 | -173 | -151 |
| 100 kHz | -171 | -174 | -153 |

## Temperature Stability

$$
\pm 1 \times 10^{-8},+25 \pm 5^{\circ} \mathrm{C} \text {, laboratory environment }
$$

## Harmonics

$-25 \mathrm{dBc}$
Sub-Harmonics and Products of 5 and 100 MHz $-50 \mathrm{dBc}$
Spurious
-80 dBc , excluding power supply line related spurs

## POWER REQUIREMENTS

## Supply Voltage

+15 VDC $\pm 5 \%$, low $n V /$ root-Hz, $<50 \mathrm{mVp}$-p ripple

## Warm-Up Power

$<25$ Watts for 10 minutes at $+25^{\circ} \mathrm{C}$

## Total Power

$<18$ Watts at $+25^{\circ} \mathrm{C}$
ADJUSTMENT
Mechanical Tuning
(Available on 5 MHz ULN)
$\pm 1 \times 10^{-6}$

| REV | DATE | REVISION RECORD | DWN | AUTH |
| :---: | :---: | :--- | :---: | :---: |
| - | $03-03-14$ | Initial Release | PAC |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## MECHANICAL

Package
RF modules and oscillators mounted on an aluminum plate
Dimensions
$8^{\prime \prime} \times 15^{\prime \prime} \times 3$ ", max

## Connectors

RF Outputs: SMA(f), located on final module in string DC Power: Terminal block

## Mounting

Thru holes on plate, 0.166 " diam., 6 places

## OTHER

Test Data
Output Levels
Phase Noise
Harmonics, Subs, Spurious

| $W_{4}$ | Wenzel Associates, Inc. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $10 \mathrm{MHz}, 100 \mathrm{MHz}$, and 1 GHz Plate Assembly |  |  |  |  |
| PN: $501-26725$ | Rev:  <br> - Data | 03-03-14 | Drawn: | $\begin{array}{\|l\|l} \hline \text { Ref: } & 22388 \\ & 09604 \end{array}$ |
| $\begin{aligned} & \text { Tolerances: } \\ & \text { (except as noted) } \\ & \text { Dimensions are in inches } \end{aligned}$ | $\begin{aligned} & 0 . x \times \text { De: } \\ & \pm 0.030 " \end{aligned}$ | $\begin{array}{c\|c} 0.0 . x \times \text { Dec: } \\ \pm 0.010 " \end{array}$ | $\begin{aligned} & \text { FSCM: } \\ & 62821 \end{aligned}$ | Page 1 of 1 |



| W4 Wenzel Associates, Inc. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $10 \mathrm{MHz}, 100 \mathrm{MHz}$, and 1 GHz Plate Assembly |  |  |  |  |
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