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## VCO Product Specification <br> <br> VCO Product Specification

 <br> Model: VCO790-1550T(Y) Rev: B Date: 8/6/2007 <br> Customer: SIRENZA MICRODEVICES, INC. <br> Operating Temperature Range: ( $-40^{\circ}$ to $85^{\circ} \mathrm{C}$ )}
(Pb) RoHS Compliant

| Parameter | Min | Typ | Max | Units | X | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range - | 950 |  | 2150 | MHz | X |  |
| Tuning Voltage: |  |  |  |  |  |  |
| 950 MHz | 0.5 | 1.4 |  | Vdc | X | *** |
| 2150 MHz |  | 19 | 22 | Vdc | X |  |
| Tuning Sensitivity: |  |  |  |  |  |  |
| 950 MHz | 60 | 80 | 100 | MHz/V | X |  |
| 1250 MHz | 50 | 70 | 90 | MHz/V | X |  |
| 1550 MHz | 55 | 75 | 95 | MHz/V | X |  |
| 1850 MHz | 45 | 65 | 85 | MHz/V | X |  |
| 2150 MHz | 35 | 55 | 75 | MHz/V | X |  |
| Output Power - | 3 | 6 | 9 | dBm | X |  |
| Output Phase Noise: |  |  |  |  |  |  |
| 1 kHz |  | -70 | -65 | $\mathrm{dBc} / \mathrm{Hz}$ |  |  |
| 10 kHz |  | -98 | -93 | $\mathrm{dBc} / \mathrm{Hz}$ |  |  |
| 100 kHz |  | -118 | -113 | $\mathrm{dBc} / \mathrm{Hz}$ | X |  |
| 1000 kHz |  | -138 | -133 | $\mathrm{dBc} / \mathrm{Hz}$ |  |  |
| Power Supply - | 4.75 | 5 | 5.25 | Volts | X |  |
| Supply Current - |  | 25 | 30 | mA | X |  |
| Harmonic Suppression: |  |  |  |  |  |  |
| 2nd Harmonic |  | -8 | -4 | dBc | X |  |
| 3rd Harmonic |  | -18 | -10 | dBc | X |  |
| Spurious (Non-Harmonic) - |  |  | -80 | dBc |  |  |
| $\begin{aligned} & \text { Frequency Pushing - 4.75- } \\ & 5.25 \mathrm{~V} \end{aligned}$ |  | 2.5 | 5 | MHz p-p | X |  |
| Frequency Pulling - into a 12 dB RL |  | 10 | 15 | MHz p-p | X |  |
| Tuning Port Capacitance - |  | 100 |  | pF |  |  |
| Output Impedance - |  | 50 |  | $\Omega$ |  |  |

## Package Information

| Package Type: | $\mathrm{T}(0.5 \times 0.5 \times 0.156$ inches $)$ | Drawing Number: | 60035 |
| :--- | :--- | :--- | :--- |

## Comments

X Indicates parameter to be tested $100 \%$ in production
*** Tuning Curve is monotonic form $\mathrm{Vt}=0 \mathrm{~V}$ dc to Vtmax and is guaranteed to oscillate at $\mathrm{Vt}=0 \mathrm{Vdc}$

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