



## VCO Product Specification

**Model:** VCO690-4790T(Y) **Rev:** **Date:** 8/31/2006  
**Customer:** SIRENZA MICRODEVICES, INC.  
**Operating Temperature Range:** ( -35 ° to 85 ° C)

**Pb RoHS Compliant**

To order models as RoHS Compliant add "Y" suffix to base model number.

| Parameter                       | Min  | Typ  | Max  | Units    | X | Remarks |
|---------------------------------|------|------|------|----------|---|---------|
| Frequency Range -               | 4690 | 4790 | 4890 | MHz      | X |         |
| Tuning Voltage:                 |      |      |      |          |   |         |
| 4690 MHz                        | 0.5  | 1.6  |      | Vdc      | X |         |
| 4890 MHz                        |      | 3.75 | 4.5  | Vdc      | X |         |
| Tuning Sensitivity -            | 70   | 94   | 105  | MHz/V    | X |         |
| Output Power -                  | -3   | 0    | 3    | dBm      | X |         |
| Output Phase Noise:             |      |      |      |          |   |         |
| 10 kHz                          |      | -85  | -78  | dBc/Hz   |   |         |
| 100 kHz                         |      | -107 | -100 | dBc/Hz   | X |         |
| Power Supply -                  | 4.85 | 5    | 5.15 | Volts    |   |         |
| Supply Current -                |      | 7    | 11   | mA       | X |         |
| Harmonic Suppression:           |      |      |      |          |   |         |
| 2nd Harmonic                    |      | -25  | -10  | dBc      | X |         |
| 3rd Harmonic                    |      | -40  | -10  | dBc      | X |         |
| Spurious (Non-Harmonic) -       |      |      | -95  | dBc      |   |         |
| Frequency Pushing - 4.85-5.15 V |      | 2    | 3    | MHz p-p  |   |         |
| Frequency Pulling - 12 db RL    |      | 9    | 12   | MHz p-p  |   |         |
| Tuning Port Capacitance -       |      | 12   |      | pF       |   |         |
| Output Impedance -              |      | 50   |      | $\Omega$ |   |         |

### Package Information

|               |                              |                 |       |
|---------------|------------------------------|-----------------|-------|
| Package Type: | T (0.5 x 0.5 x 0.223 inches) | Drawing Number: | 60035 |
|---------------|------------------------------|-----------------|-------|

### Comments

**X** Indicates parameter to be tested 100% in production

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