



VCO Product Specification

Model: VCO-116TC **Rev:** - **Date:** 7/18/2002

Customer: VARI-L COMPANY

Operating Temperature Range: (-55 ° to 100 ° C)

| Parameter | Min | Typ | Max | Units | X | Remarks |
|-----------------------------------|-------|------|-------|---------|---|---------|
| Frequency Range - | 150 | | 300 | MHz | X | |
| Tuning Voltage: | | | | | | |
| 150 MHz | 0 | 1.5 | | Vdc | X | |
| 300 MHz | | 17 | 20 | Vdc | X | |
| Tuning Sensitivity: | | | | | | |
| 150 MHz | 6.4 | 8.5 | 10.6 | MHz/V | X | |
| 187.5 MHz | 8 | 10.6 | 13.3 | MHz/V | X | |
| 225 MHz | 8.3 | 11 | 13.8 | MHz/V | X | |
| 262.5 MHz | 7.4 | 9.8 | 13.3 | MHz/V | X | |
| 300 MHz | 3 | 5 | 7.3 | MHz/V | X | |
| Output Power - | 10 | 12.5 | 16 | dBm | X | |
| Output Phase Noise: | | | | | | |
| 10 kHz | | -100 | -94 | dBc/Hz | X | |
| 100 kHz | | -120 | -114 | dBc/Hz | X | |
| 1000 kHz | | -140 | -134 | dBc/Hz | X | |
| Power Supply - | 14.75 | 15 | 15.25 | Volts | X | |
| Supply Current - | | 12.5 | 15 | mA | X | |
| Harmonic Suppression: | | | | | | |
| 2nd Harmonic | | -12 | -10 | dBc | X | |
| 3rd Harmonic | | -12 | -10 | dBc | X | |
| Spurious (Non-Harmonic) - | | | -80 | dBc | | |
| Frequency Pushing - 14.75-15.25 V | | 0.7 | 1.5 | MHz p-p | | |
| Frequency Pulling - 12 dB RL | | 4 | 8 | MHz p-p | | |
| Output Impedance - | | 50 | | Ω | | |
| Modulation: | | | | | | |
| Bandwidth | 250 | 350 | | kHz | | |
| Input Impedance | | 0.05 | | kΩ | | |

Package Information

| | | | |
|---------------|-----------------------------|-------------------|-------|
| Package Type: | TO-8 (Cir) | Drawing Number: | A8678 |
| Dimensions: | 0.504 x 0.504 x 0.27 inches | Drawing Revision: | P |

Comments

X Indicates parameter to be tested 100% in production

| | | | | |
|---|------------------------------|--|--|---------------------------|
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