PRINCETON MICROWAVE TECHNOLOGY INC.

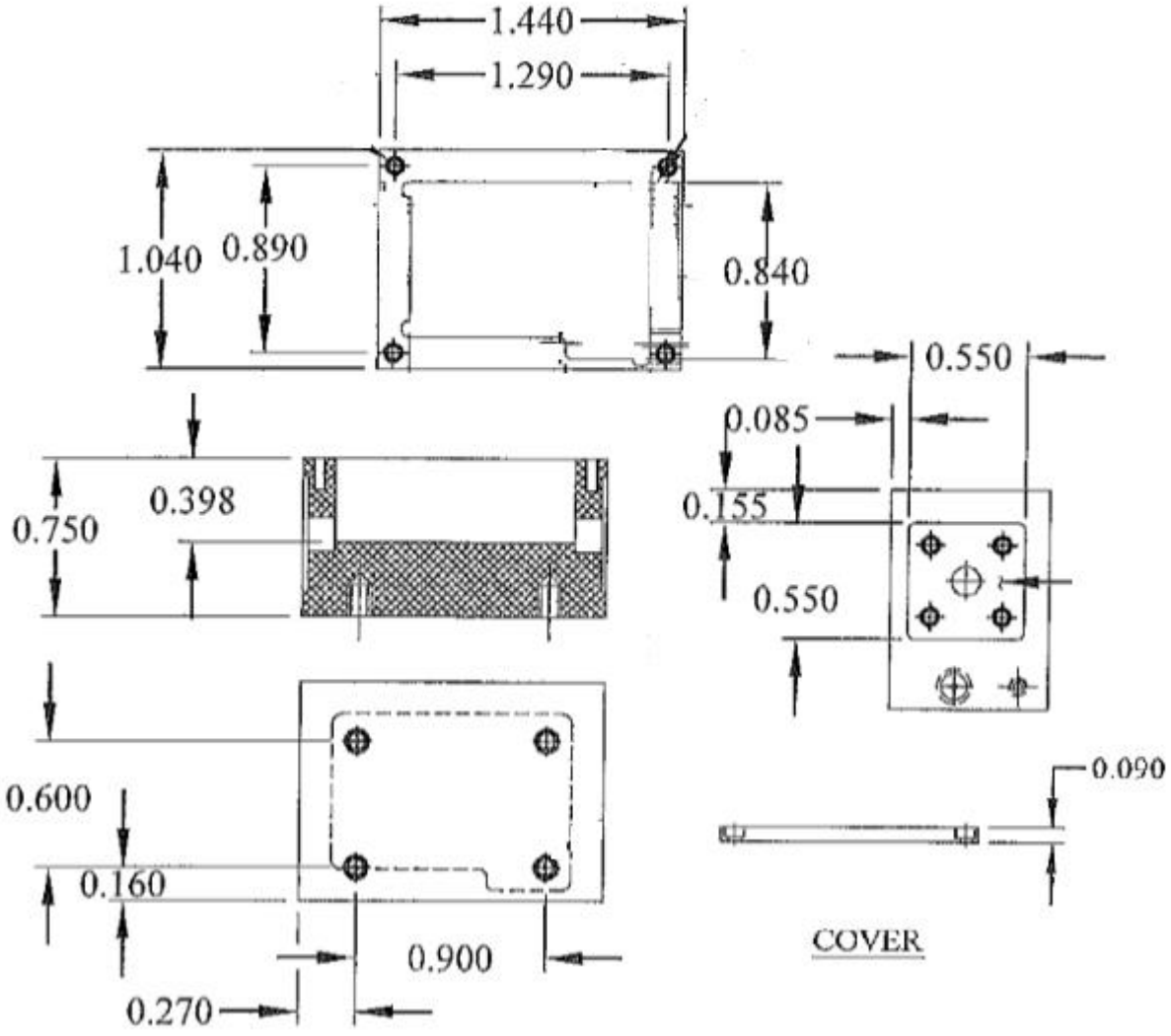
*The SOURCE For High Performance Frequency Source*

| AMPLIFIER<br>150-450 MHz<br>Small Footprint | **PmT Amplifier**<br>Model: PmT-NSN-150-450 MHz |
|---|---|
| **FEATURES:**<br>■ Low Noise Figure<br>■ Sealed Module<br>■ Broadband Performance<br>■ Excellent Unit-to-Unit Repeatability<br>■ -50ºC to 100ºC Standard<br>■ RoHS Compliant | |

| Typical Electrical Specifications (TA=25C) | |
|---|---|
| Parameters | Specifications |
| Frequency Range | 150-450 MHz |
| Supply Voltage | 14.55-15.45 V |
| Supply Current, max | 120 mA |
| Overvoltage | +18 V |
| Reverse voltage | -50 V |
| Small Signal Gain (-10 to 0 dBm in) over frequency | 12±1 dB |
| Small signal Gain over temperature, max | 0.8 dB p-p |
| Power at 1 dB compression | +22 dBm min. |
| Small signal Gain(-10 to 0 dBm) out of band(10-150 MHz, > 450 MHz) | <1 dB above mid band |
| Input VSWR (50 ohms) | 1.75 : 1 max |
| Output VSWR (50 ohms) | 1.75 : 1 max |
| Reverse Isolation | 15 dB max |
| Two-Tone Third-order intermodulation intercept point (0 dBm/tone) | +35 dBm min |
| Two-Tone Second harmonic (150-200MHz) intercept point. (0 dBm/tone) | +55 dBm min. |
| High Input Power Level (no damage) | +15 dBm min |
| Noise Figure | 6.5 dB max |
| Warm-up time-Gain and P1dB measured | 5 Minutes |
| Operating Temperature | -25 °C to 70 °C |
| Storage Temperature | -55 °C to 125 °C |
| **Typical Test Data** (of actual device) | |
| Supply Voltage | 15 V |
| Supply Current, max | 119 mA |
| Overvoltage | >+18 V |
| Reverse voltage | <-50 V |
| Small Signal Gain (-10 to 0 dBm in) over frequency | 12.3 dB |
| Small signal Gain over temperature, max | <0.2 dB p-p |
| Power at 1 dB compression | +23.1 dBm |

| | |
|---|---|
| Small signal Gain(-10 to 0 dBm) out of band(10-150 MHz, > 450 MHz) | < mid |
| Input VSWR (50 ohms) | 1.06 : 1 |
| Output VSWR (50 ohms) | 1.4 : 1 |
| Reverse Isolation | 14 dB |
| Two-Tone Third-order intermodulation intercept point (0 dBm/tone) | +36 dBm |
| Two-Tone Second harmonic (150-200MHz) intercept point. (0 dBm/tone) | +5 dBm |
| High Input Power Level (no damage) | >15 dBm |
| Noise Figure | 6.5 dB |
| Warm-up time-Gain and P1dB measured | <1 Minutes |

Outline:



Graph: Phase Noise and Gain