

| TYPICAL OPERATING CONDITIONS | | | POWER SUPPLY REQUIREMENTS | | |
|------------------------------|----------|-------------|---------------------------|-------------|-----------------------|
| ELEMENT | VOLTAGE | CURRENT | VOLTAGE MIN | VOLTAGE MAX | CURRENT MAX |
| HEATER | -6.3 Vdc | 2.0 A | -5.985 Vdc | -6.615 Vdc | 2.8 A |
| HELIX | W/ RF | * 270 mApk | GROUND | | 500 mApk |
| | W/O RF | ** 100 mApk | | | |
| GRID ON | 225 Vpk | 0 mApk | 100 Vpk | 250 Vpk | 10 mApk |
| GRID OFF | -200 Vdc | 0 mA | -200 Vdc | -200 Vdc | 1.0 mA |
| CATHODE (Ek) | -10.2 kV | 1300 mApk | -10.2 kV | -11 kV | 1300 mApk |
| COLLECTOR | 8.16 kV | *1030 mApk | 80% X Ek ± 2% | | 800 TO * 1200 mApk |
| | | **1200 mApk | | | **1300 mApk |

| RF PERFORMANCE | | | |
|----------------|------------------------------|-------------------------------|---------------------------|
| FREQ GHz | TYP SAT POWER OUTPUT (WATTS) | MIN SPEC POWER OUTPUT (WATTS) | TYP GAIN AT SPEC POWER dB |
| 5.0 | 2400 | 1780 | 38 |
| 6.0 | 2750 | 1780 | 38 |
| 7.0 | 2290 | 1780 | 38 |
| 8.0 | 2510 | 1780 | 38 |
| 9.0 | 2750 | 1780 | 38 |
| 10.0 | 2750 | 1780 | 38 |
| 11.0 | 2090 | 1780 | 37 |

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.

NOTE 2: HEATER, COLLECTOR AND GRID VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITH EQUALIZER.

| SELECTED PERFORMANCE | TYPICAL | SPECIFIED |
|-------------------------|---------------|---------------|
| INPUT VSWR | 1.8:1 | 2.0:1 |
| OUTPUT VSWR | 1.8:1 | 2.0:1 |
| MAXIMUM DUTY | 5% | 5% |
| MAXIMUM PULSEWIDTH | — | 100 μ sec |
| GRID CAPACITANCE | 48 pF | 50 pF MAX |
| MIN HARMONIC SEPARATION | -5.5 dBc | -3 dBc MAX |
| NOISE POWER DENSITY | -19.5 dBm/MHz | 0 dBm/MHz |
| PRIME POWER | 570 W | 1000 W |
| TEMPERATURE RANGE | -40° to 85°C | — |

* WITH RF DRIVE
 ** WITHOUT RF DRIVE