

| TYPICAL OPERATING CONDITIONS | | | POWER SUPPLY REQUIREMENTS | | |
|------------------------------|------------|---------|---------------------------|-------------|-------------|
| ELEMENT | VOLTAGE | CURRENT | VOLTAGE MIN | VOLTAGE MAX | CURRENT MAX |
| HEATER | -6 Vdc | 1.62 A | -5.8 Vdc | -6.6 Vdc | 2 A |
| HELIX | W/ RF | GROUND | GROUND | | 10 mA |
| | W/O RF | GROUND | GROUND | | |
| FE ON | -40 Vdc | 0.1 mA | 0 | -75 Vdc | 1 mA |
| FE OFF | -1300 Vdc | 0.1 mA | -1300 Vdc | -1500 Vdc | 1 mA |
| CATHODE (Ek) | -10.75 kV | 290 mA | -10 kV | -10.8 kV | 300 mA |
| COLLECTOR W/ RF | #1 6.02 kV | 80 mA | 56% x Ek ±2% | | 150 mA |
| | #2 4.3 kV | 202 mA | 40% x Ek ±2% | | 300 mA |

| RF PERFORMANCE | | | |
|----------------|------------------------------|-------------------------------|---------------------------|
| FREQ GHz | TYP SAT POWER OUTPUT (WATTS) | MIN SPEC POWER OUTPUT (WATTS) | TYP GAIN AT SPEC POWER dB |
| 5.850 | 375 | 325 * | 38 |
| 6.000 | 375 | 325 | 38 |
| 6.425 | 375 | 325 | 38 |
| 6.650 | 375 | 325 | 38 |
| X | | | |
| 13.750 | 420 | 325 | 52 |
| 14.000 | 420 | 325 ** | 52 |
| 14.250 | 420 | 325 | 52 |
| 14.500 | 420 | 325 | 52 |

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.
 NOTE 2: HEATER, COLLECTOR, GRID OR FOCUS ELECTRODE (FE) 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 | 2.0:1 | 2.3:1 |
| OUTPUT VSWR | 2.3:1 | 2.5:1 |
| MAXIMUM DUTY | — | CW |
| FE CAPACITANCE | 50 pF | 65 pF |
| MIN HARMONIC SEPARATION | -5/-20 dBc | -3*/-15** dBc |
| NOISE POWER DENSITY | -12 dBm/MHz | -10 dBm/MHz |
| PRIME POWER | 1412 W | 1450 W |
| TEMPERATURE RANGE | -40° to 85°C | — |

SPECTRAL REGROWTH:

| FREQUENCY | MINIMUM LINEAR POWER | MODULATION | LEVEL@1 SYMBOL RATE. |
|-----------|----------------------|------------|----------------------|
| 5.85 GHz | 225W | QPSK | -26dBc |
| 6.425 GHz | 225W | QPSK | -26dBc |
| 13.75 GHz | 125W | QPSK | -26dBc |
| 14.5 GHz | 125W | QPSK | -26dBc |

*An ISO 9001:2000 Quality System
 Certified Company*

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