

| TYPICAL OPERATING CONDITIONS | | | POWER SUPPLY REQUIREMENTS | | |
|------------------------------|------------|---------|---------------------------|-------------|-------------|
| ELEMENT | VOLTAGE | CURRENT | VOLTAGE MIN | VOLTAGE MAX | CURRENT MAX |
| HEATER | -6.3 Vdc | 0.7 A | -5.8 Vdc | -6.6 Vdc | 1.5 A |
| HELIX | W/ RF | GROUND | GROUND | | |
| | W/O RF | | | | |
| | | 1.5 mA | | | 4 mA |
| | | 0.5 mA | | | |
| FE ON | -6.3 Vdc | 0.1 mA | 0 | -40 Vdc | 1 mA |
| FE OFF | -1200 Vdc | 0.1 mA | -1200 Vdc | -1400 Vdc | 0.2 mA |
| CATHODE (Ek) | -14.25 kV | 190 mA | -13.5 kV | -14.5 kV | 200 mA |
| COLLECTOR W/ RF | #1 4.42 kV | 10 mA | 31% x Ek ±2% * | | 75 mA |
| | #2 2.28 kV | 180 mA | 16% x Ek ±2% * | | 200 mA |

| RF PERFORMANCE | | | |
|----------------|------------------------------|---------------------------------------|--------------------------|
| FREQ GHz | TYP SAT POWER OUTPUT (WATTS) | MAX OPERATING POWER OUTPUT (WATTS) ** | TYP GAIN AT SAT POWER dB |
| 27.0 | 250 | 120 | 34 |
| 28.0 | 250 | 120 | 34 |
| 29.0 | 250 | 120 | 34 |
| 30.0 | 250 | 120 | 34 |
| 31.0 | 250 | 120 | 34 |

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.
 NOTE 2: HEATER, COLLECTOR AND FOCUS ELECTRODE (FE) VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.
 NOTE 3: CAN BE MADE AVAILABLE WITH INTEGRATED SSA.

* COLLECTOR DEPRESSIONS SUBJECT TO CHANGE

** TWT IS DESIGNED FOR LINEAR/DIGITAL COMMUNICATION APPLICATIONS. TYPICAL SIDEBAND RE-GROWTH WITH 100 WATTS OUTPUT POWER USING QPSK MODULATION IS -26 dBc.

| SELECTED PERFORMANCE | TYPICAL | SPECIFIED |
|-------------------------|--------------|-------------|
| INPUT VSWR | 1.25:1 | 2:1 |
| OUTPUT VSWR | 1.5:1 | 1.75:1 |
| MAXIMUM DUTY | — | CW |
| FE CAPACITANCE | 50 pF | 60 pF |
| MIN HARMONIC SEPARATION | -30 dBc | -15 dBc * |
| NOISE POWER DENSITY | -35 dBm/MHz | -30 dBm/MHz |
| PRIME POWER (@ 120 W) | 600 W | 700 W |
| TEMPERATURE RANGE | -40° to 85°C | — |

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 Certified Company

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