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This model number is subject to the jurisdiction of the U.S. Department of Commerce.

MODEL NO. MEC 5203

1.0 to 2.5 GHz

| TYPICAL OPERATING CONDITIONS | | | POWER SUPPLY REQUIREMENTS | | | |
|------------------------------|----------|---------|---------------------------|--------------|-------------|--------|
| ELEMENT | VOLTAGE | CURRENT | VOLTAGE MIN | VOLTAGE MAX | CURRENT MAX | |
| HEATER | -6.3 Vdc | 3.5 A | -5.2 Vdc | -6.6 Vdc | 4.5 A | |
| HELIX | W/RF | GROUND | 90 mA | GROUND | | 100 mA |
| | W/O RF | | | | | |
| GRID ON | 150 Vdc | 1 mA | 100 Vdc | 250 Vdc | 10 mA | |
| GRID OFF | -200 Vdc | 0.1 mA | -200 Vdc | -500 Vdc | 1 mA | |
| CATHODE (Ek) | -4.70 kV | 900 mA | -4.5 kV | -5.2 kV | 1 A | |
| COLLECTOR W/ RF | #1 | 3.71 kV | 425 mA | 79% X Ek ±2% | | 0.55 A |
| | #2 | 1.65 kV | 250 mA | 35% X Ek ±2% | | 1 A |

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

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

| SELECTED PERFORMANCE | TYPICAL | SPECIFIED |
|-------------------------|---------------|-------------|
| INPUT VSWR | 2:1 | 2.5:1 |
| OUTPUT VSWR | 2:1 | 2.5:1 |
| MAXIMUM DUTY | — | CW |
| GRID CAPACITANCE | 45 pF | 60 pF |
| MIN HARMONIC SEPARATION | -2 dBc | -1 dBc |
| NOISE POWER DENSITY | -35 dBm/MHz | -30 dBm/MHz |
| PRIME POWER | 2719 W | 3000 W |
| TEMPERATURE RANGE | -40° to 85 °C | — |

| RF PERFORMANCE | | | |
|----------------|------------------------------|-------------------------------|---------------------------|
| FREQ GHz | TYP SAT POWER OUTPUT (WATTS) | MIN SPEC POWER OUTPUT (WATTS) | TYP GAIN AT SPEC POWER dB |
| 1.0 | 540 | 535 | 28 |
| 1.2 | 550 | 535 | 35 |
| 1.4 | 550 | 535 | 41 |
| 1.6 | 600 | 535 | 41 |
| 1.8 | 630 | 535 | 43 |
| 2.0 | 630 | 535 | 43 |
| 2.2 | 630 | 535 | 41 |
| 2.4 | 630 | 535 | 38 |
| 2.5 | 630 | 535 | 37 |

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

±4 dB GAIN EQUALIZER AVAILABLE.

An ISO 9001:2000 Quality System
 Certified Company

11/08