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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

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