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MODEL NO. MEC 5419 (GR)
 MEC 5420 (FE)
 7.5 to 18.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	1.6 A	-6.0 Vdc	-6.6 Vdc	2 A
HELIX	W/ RF	GROUND	GROUND	GROUND	12 mA
	W/O RF				
		1 mA			
FE ON	-45 Vdc	0.1 mA	0	-75 Vdc	1 mA
FE OFF	-1300 Vdc	0.1 mA	-1500 Vdc	-1700 Vdc	1 mA
GRID ON	190 Vdc	1 mA	125 Vdc	250 Vdc	10 mA
GRID OFF	-200 Vdc	0.1 mA	-200 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-10.2 kV	260 mA	-10 kV	-10.5 kV	280 mA
COLLECTOR W/ RF	#1 5.3 kV	45 mA	52% x Ek ± 2%		100 mA
	#2 3.67 kV	208 mA	36% x Ek ± 2%		280 mA

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.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2:1	2.5:1
OUTPUT VSWR	2:1	2.25:1
MAXIMUM DUTY	—	CW
FE CAPACITANCE	50 pF	65 pF
GRID CAPACITANCE	37 pF	50 pF
MIN HARMONIC SEPARATION	-8 dBc	-5 dBc *
NOISE POWER DENSITY	-15 dBm/MHz	-10 dBm/MHz
PRIME POWER	1083 W	1250 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
7.5	275	250 *	35
8.0	275	250	45
9.0	300	250	50
10.0	275	250	55
11.0	300	250	55
12.0	300	250	55
13.0	300	250	55
14.0	300	250	55
15.0	300	250	50
16.0	290	250	55
17.0	280	250	50
18.0	270	250	35

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

*An ISO 9001:2000 Quality System
 Certified Company*

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