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MODEL NO. MEC 5405 (GR)  
 MEC 5406 (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		12 mA
	W/O RF	7 mA			
FE ON	-65 Vdc	0.1 mA	0	-75 Vdc	1 mA
FE OFF	-1300 Vdc	0.1 mA	-1500 Vdc	-1700 Vdc	1 mA
GRID ON	160 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	250 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	198 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	1047 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	250	200 *	35
8.0	250	200	45
9.0	270	200	50
10.0	250	200	55
11.0	270	200	55
12.0	270	200	55
13.0	270	200	55
14.0	270	200	55
15.0	260	200	55
16.0	250	200	55
17.0	240	200	50
18.0	230	200	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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