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MODEL NO. MEC 3104

12.0 TO 18.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	2.2 A	-6.1 Vdc	-6.5 Vdc	2.75 A
HELIX	GROUND	* 375 mApk	GROUND		700 mApk
		** 139 mApk			
GRID ON	176 Vpk	2 mApk	100 Vpk	300 Vpk	30 mApk
GRID OFF	-300 Vdc	0.5 mA	-200 Vdc	-500 Vdc	1.0 mA
CATHODE (Ek)	-14.0 kV	1.92 A	-13.4 kV	-15.4 kV	2.0 Apk
COLLECTOR #1	10.4 kV	* 259 mApk	74% X Ek ±2%		410 mApk
		** 110 mApk			
COLLECTOR #2	8.3 kV	* 520 mApk	59% X Ek ±2%		700 mApk
		** 54 mApk			
COLLECTOR #3	6.17 kV	* 849 mApk	44% X Ek ±2%		1800 mApk
		** 1620 mApk			

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
12.0	4000	3470	32
13.0	5000	3470	35
14.0	5000	3470	37
15.0	5000	3470	39
16.0	5000	3470	37
17.0	5000	3470	34
18.0	4000	3470	32

GAIN IS WITH EQUALIZER.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2.0:1	2.5:1
OUTPUT VSWR	1.6:1	2.0:1
MAXIMUM DUTY	—	6%
MAXIMUM PULSEWIDTH	—	50 μsec
GRID CAPACITANCE	58 pF	60 pF
NOISE POWER DENSITY	-10 dBm/MHz	5 dBm/MHz
PRIME POWER	1000 W	1800 W
TEMPERATURE RANGE	-40° to 85 °C	—

* WITH RF DRIVE

** WITHOUT RF DRIVE

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

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

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 Certified Company

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