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MODEL NO. MTI 3044J

8.0 to 18.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	1.9 A	-6.1 Vdc	-6.5 Vdc	2.5 A
HELIX	W/RF	GROUND	GROUND		500 mApk
	W/O RF				
GRID ON	123 Vpk	1 mApk	100 Vpk	200 Vpk	30 mApk
GRID OFF	-200 Vdc	0.2 mA	-200 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-11.2 kV	1.6 Apk	-10.5 kV	-11.5 kV	1.8 Apk
COLLECTOR W/ RF	8 kV	1.275 Apk	72% X Ek ± 2%		1.8 Apk

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	2.1:1	2.5:1
OUTPUT VSWR	1.9:1	2.5:1
MAXIMUM DUTY	—	4%
MAXIMUM PULSEWIDTH	—	100 μsec
GRID CAPACITANCE	46 pF	50 pF
MIN HARMONIC SEPARATION	-4.3 dBc	-3 dBc *
NOISE POWER DENSITY	-12 dBm/MHz	-8 dBm/MHz
PRIME POWER	566 W	750 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
8.0	1170	1000 *	54
9.0	1475	1000	60
10.0	1580	1000	60
11.0	1780	1000	62
12.0	2140	1000	62
13.0	2250	1000	61
14.0	2090	1000	59
15.0	2000	1000	58
16.0	2000	1000	55
17.0	1900	1000	48
18.0	1250	1000	42

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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