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MODEL NO. MTI 3048D

8.7 to 10.5 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	1.7 A	-6.1 Vdc	-6.5 Vdc	2.5 A
HEX	W/RF	GROUND	GROUND		550 mApk
	W/O RF				
		70 mApk			
GRID ON	200 Vpk	2 mApk	110 Vpk	300 Vpk	150 mApk
GRID OFF	-200 Vdc	0	-150 Vdc	-230 Vdc	.2 mA
CATHODE (Ek)	-11.9 kV	1.6 Apk	-11 kV	-13 kV	2 Apk
COLLECTOR W/ RF	#1	7.8 kV	0.9 Apk	65% X Ek ±2%	1.2 Apk
	#2	5 kV	0.4 Apk	42% X Ek ±2%	2 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	1.8:1	2.0:1
OUTPUT VSWR	1.8:1	2.0:1
MAXIMUM DUTY	—	10%
MAXIMUM PULSEWIDTH	—	100 μsec
GRID CAPACITANCE	49 pF	55 pF
MIN HARMONIC SEPARATION	-16 dBc	-10 dBc *
NOISE POWER DENSITY	-15 dBm/MHz	-10 dBm/MHz
PRIME POWER	1270 W	1400 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
8.7	3700	3500	46
8.8	3800	3500	46
8.9	3900	3600	46
9.0	4000	3600 *	46
9.2	4000	3800	46
9.4	4100	4000	46
9.6	4100	4000	47
9.8	4200	4000	47
10.0	4200	4000	47
10.1	4100	3800	47
10.2	4000	3700	47
10.3	3800	3600	46
10.4	3600	3200	46
10.5	3400	3000	45

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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