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MODEL NO. MTG 3041L2

2.0 to 8.0 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	3.0 A
HELIX	W/ RF	GROUND	GROUND		700 mApk
	W/O RF	650 mApk			
GRID ON	217 Vpk	1.8 mApk	100 Vpk	250 Vpk	20 mApk
GRID OFF	-250 Vdc	0.01 mA	-250 Vdc	-500 Vdc	0.5 mA
CATHODE (Ek)	-8.5 kV	1.65 Apk	-8.2 kV	-8.8 kV	1.8 Apk
COLLECTOR W/ RF	6.38 kV	1 Apk	75% X Ek ±2%		1.8 Apk

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
2.0	2040	2000 *	38
2.2	2040	2000	38
2.3	2300	2000 **	39
2.5	2400	2000	40
2.6	2500	2000 ***	44
3.0	2500	2000	50
4.0	2500	2000	57
5.0	2500	2000	58
6.0	2500	2000	55
7.0	2350	2000	50
7.5	2300	2000	48
8.0	2040	2000	44

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	3.5:1	3.5:1
OUTPUT VSWR	1.8:1	2.5:1
MAXIMUM DUTY	—	6%
MAXIMUM PULSEWIDTH	—	100 μsec
GRID CAPACITANCE	47 pF	50 pF
MIN HARMONIC SEPARATION	3.5/0/-2.5 dBc	4.5*/1.5**/-1*** dBc
NOISE POWER DENSITY	-12 dBm/MHz	-10 dBm/MHz
PRIME POWER	725 W	800 W
TEMPERATURE RANGE	-40° to 85 °C	—

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITH EQUALIZER AND LIMITER. (FOR HARMONIC INJECTION)

An ISO 9001:2000 Quality System
 Certified Company

11/08