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MODEL NO. MTI 3048Q

8.2 to 12.4 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
HELIX	W/RF	GROUND	GROUND		550 mApk
	W/O RF				
GRID ON	200 Vpk	2.5 mApk	110 Vpk	300 Vpk	150 mApk
GRID OFF	-200 Vdc	0	-150 Vdc	-230 Vdc	.2 mA
CATHODE (Ek)	-12 kV	1.6 Apk	-11 kV	-13 kV	2 Apk
COLLECTOR W/ RF	#1	7.8 kV	65% X Ek ±2%		1.2 Apk
	#2	5 kV	42% X Ek ±2%		2 Apk

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
8.2	2600	2500 *	45
8.5	3500	3000	47
9.0	4000	3000	50
10.0	4300	3000	50
11.0	4180	3000	48
12.4	3020	3000	43

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.
 NOTE 2: HEATER, COLLECTOR AND GRID VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2.3:1	2.5:1
OUTPUT VSWR	2.0:1	2.5:1
MAXIMUM DUTY	—	8%
MAXIMUM PULSEWIDTH	—	100 μsec
GRID CAPACITANCE	49 pF	55 pF
MIN HARMONIC SEPARATION	-10 dBc	-8 dBc *
NOISE POWER DENSITY	-15 dBm/MHz	-10 dBm/MHz
PRIME POWER	1020 W	1300 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

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