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MODEL NO. MTI 3948U

9.0 to 10.0 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	2.8 A
HELIX	W/RF	GROUND	GROUND		500 mApk
	W/O RF				
		80 mApk			
GRID ON	185 Vpk	1.0 mApk	100 Vpk	300 Vpk	30 mApk
GRID OFF	-325 Vdc	.02 mA	-300 Vdc	-500 Vdc	0.5 mA
CATHODE (Ek)	-14.2 kV	2.25 Apk	-13 kV	-15 kV	2.5 Apk
COLLECTOR W/ RF	#1	10.5 kV	825 mApk	74% X Ek ±2%	
	#2	7.67 kV	740 mApk	54% X Ek ±2%	
	#3	5.4 kV	285 mApk	38% X Ek ±2%	

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
9.0	8000	7945	47
9.1	8000	7945	47
9.2	8000	7945	47
9.3	8000	7945	47
9.4	8000	7945	48
9.5	8000	7945	47
9.6	8000	7945	47
9.7	8000	7945	47
9.8	8000	7945	47
9.9	8000	7945	47
10.0	8000	7945	47

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.6:1	2.0:1
OUTPUT VSWR	1.4:1	2.0:1
MAXIMUM DUTY	5%	5%
MAXIMUM PULSEWIDTH	50 μsec	100 μsec
GRID CAPACITANCE	49 pF	60 pF
MIN HARMONIC SEPARATION	-12 dBc	-10 dBc *
NOISE POWER DENSITY	>-14 dBm/MHz	-10 dBm/MHz
PRIME POWER	1150 W	1500 W
TEMPERATURE RANGE	-40° to 85 °C	—————

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

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

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

*An ISO 9001:2000 Quality System
 Certified Company*

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