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MODEL NO. MTI 3056C

15.0 to 17.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	2 A	-6.0 Vdc	-6.6 Vdc	3.0 A
HELIX	W/RF	GROUND	GROUND	GROUND	500 mApk
	W/O RF				
GRID ON	235 Vpk	2 mApk	130 Vpk	300 Vpk	30 mApk
GRID OFF	-250 Vdc	0.005 mA	-250 Vdc	-500 Vdc	0.1 mA
CATHODE (Ek)	-13.5 kV	1.65 Apk	-13 kV	-13.75 kV	3.0 Apk
COLLECTOR W/ RF	GROUND	1.1 Apk	GROUND	GROUND	1.6 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	2:1
OUTPUT VSWR	1.8:1	2:1
MAXIMUM DUTY	—	2%
MAXIMUM PULSEWIDTH	—	100 $\mu$ sec
GRID CAPACITANCE	35 pF	50 pF
MIN HARMONIC SEPARATION	-20 dBc	-15 dBc *
NOISE POWER DENSITY	-13 dBm/MHz	-10 dBm/MHz
PRIME POWER	492 W	500 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
15.00	3800	3800 *	50
15.25	3850	3800	52
15.50	3900	3800	50
15.75	4075	4000	51
16.00	4175	4000	50
16.25	4200	4000	53
16.50	4250	4000	54
16.75	4300	4000	55
17.00	4400	4000	56

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITHOUT EQUALIZER.

*An ISO 9001:2000 Quality System  
 Certified Company*

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