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This model number is subject to the jurisdiction of the U.S. Department of Commerce.

MODEL NO. MTE 5107

2.0 to 4.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	2.1 A	-6 Vdc	-6.6 Vdc	3 A
HELIX	W/RF	GROUND	GROUND		45 mA
	W/O RF				
ANODE	210 Vdc	0.7 mA	0	500 Vdc	4 mA
CATHODE (Ek)	-4.4 kV	410 mA	-4.1 kV	-4.6 kV	450 mA
COLLECTOR W/ RF	3.08 kV	375 mA	70% X Ek ±2%		450 mA

NOTE 1: CATHODE AND ANODE VOLTAGES ARE MEASURED WITH RESPECT TO GROUND.

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

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
2.00	250	250 *	44
2.25	295	250	48
2.50	320	250	51
2.75	330	250	52
3.00	345	250	53
3.25	360	250	53
3.50	360	250	52
3.75	355	250	51
4.00	345	250	49

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.9:1	2.5:1
OUTPUT VSWR	1.7:1	2.5:1
MAXIMUM DUTY	—	CW
MIN HARMONIC SEPARATION	-5 dBc	-4 dBc *
NOISE POWER DENSITY	-30 dBm/MHz	-10 dBm/MHz
PRIME POWER	1300 W	1500 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

11/08