



11361 Sunrise Park Drive, Rancho Cordova, Calif. 95742-6587
 Telephone (916) 638-3344 Fax (916) 636-7453

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

MODEL NO. M5670NO
 MEC 5670 (GR)
 0.8 to 2.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	3.4 A	-5.2 Vdc	-6.6 Vdc	4.5 A
HELIX	W/RF	GROUND	GROUND		80 mA
	W/O RF				
ANODE	140 Vdc	0.4 mA	0	500 Vdc	4 mA
GRID ON	110 Vdc	0.5 mA	100 Vdc	250 Vdc	10 mA
GRID OFF	-200 Vdc	0.1 mA	-200 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-3.75 kV	450 mA	-3 kV	-4 kV	550 mA
COLLECTOR W/ RF	3.2 kV	420 mA	87% X Ek ±2%		550 mA

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
0.8	230	200 *	24
0.9	285	250	27
1.0	330	250 **	31
1.2	320	250	34
1.4	300	250	36
1.6	300	250	35
1.8	295	250	33
2.0	280	250	29

NOTE 1: CATHODE AND ANODE VOLTAGES ARE MEASURED WITH RESPECT TO GROUND.
 NOTE 2: HEATER, COLLECTOR AND GRID VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.
 NOTE 3: ANODE VOLTAGE NOT REQUIRED WITH GRID MODULATED VERSION.

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.7:1	2.5:1
OUTPUT VSWR	1.6:1	2.5:1
MAXIMUM DUTY	—	CW
GRID CAPACITANCE	50 pF	65 pF
MIN HARMONIC SEPARATION	-4.0/-7.0 dBc	-2 */-3.0 ** dBc
NOISE POWER DENSITY	-40 dBm/MHz	-30 dBm/MHz
PRIME POWER	1500 W	1700 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

11/08