



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. M5889NO
 MEC 5889 (GRID)
 4.0 to 8.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	2.3 A	-6 Vdc	-6.6 Vdc	3.5 A
HELIX	W/RF	GROUND	GROUND		12 mA
	W/O RF				
ANODE	240 Vdc	1 mA	0	450 Vdc	4 mA
GRID ON	140 Vdc	0.5 mA	125 Vdc	250 Vdc	10 mA
GRID OFF	-200 Vdc	0.5 mA	-200 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-8 kV	260 mA	-7.7 kV	-8.2 kV	300 mA
COLLECTOR W/ RF	4.4 kV	275 mA	55% X Ek ±2%		300 mA

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
4.0	260	250 *	48
4.5	320	250	54
5.0	370	250	57
5.5	395	250	59
6.0	395	250	59
6.5	385	250	57
7.0	370	250	54
7.5	360	250	50
8.0	285	250	46

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	1.6:1	2.5:1
OUTPUT VSWR	2:1	2.5:1
MAXIMUM DUTY	—	CW
GRID CAPACITANCE	50 pF	65 pF
MIN HARMONIC SEPARATION	-8 dBc	-4 dBc *
NOISE POWER DENSITY	-20 dBm/MHz	-10 dBm/MHz
PRIME POWER	1300 W	1400 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

11/08