TELEDYNE MEC
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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	6 mA	GROUND		12 mA
	W/O RF		2 mA			
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

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.

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	——

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

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

An ISO 9001:2000 Quality System Certified Company

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