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MODEL NO. MEC 3848

8.0 to 11.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS			
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX	
HEATER	-6.3 Vdc	2.1 A	-6.1 Vdc	-6.5 Vdc	2.5 A	
HELIX	W/RF	GROUND	400 mApk	GROUND		500 mApk
	W/O RF					
GRID ON	150 Vpk	0	100 Vpk	300 Vpk	30 mApk	
GRID OFF	-300 Vdc	0	-300 Vdc	-500 Vdc	0.5 mA	
CATHODE (Ek)	-13.3 kV	2.3 Apk	-13 kV	-15.0 kV	2.8 Apk	
COLLECTOR W/ RF	#1	9.0 kV	0.84 Apk	69% X Ek ±2%		1.1 Apk
	#2	6.4 kV	0.48 Apk	48% X Ek ±2%		0.8 Apk
	#3	4.7 kV	0.58 Apk	35% X Ek ±2%		2.5 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	1.5:1	2:1
OUTPUT VSWR	1.5:1	1.8:1
MAXIMUM DUTY	—	5%
MAXIMUM PULSEWIDTH	—	100 μsec
GRID CAPACITANCE	40 pF	60 pF
MIN HARMONIC SEPARATION	-14 dBc	-10 dBc *
NOISE POWER DENSITY	-14 dBm/MHz	-10 dBm/MHz
PRIME POWER	947 W	1200 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
8.0	8000	7500 *	48
8.5	8300	8000	48
9.0	8300	8000	49
9.2	8300	8000	50
9.4	8300	8000	50
9.6	8300	8000	50
9.8	8300	8000	50
10.0	8300	8000	51
10.5	8000	7500	50
11.0	7000	6500	49

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITHOUT EQUALIZER.

An ISO 9001:2000 Quality System
 Certified Company

12/08