



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

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MODEL NO. MEC 3082B

2.7 to 5.7 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.6 V	4.2 A	6.4 V	6.8 V	5 A
HELIX	W/ RF	* .63 Apk	GROUND		0.8 Apk
	W/O RF	** .12 Apk			
GRID ON	192 Vpk	3.0 mApk	100 Vpk	250 Vpk	30 mApk
GRID OFF	-400 Vdc	0 mA	-400 Vdc	-500 Vdc	1.0 mA
CATHODE (Ek)	-13.0 kV	3.02 Apk	-12.5 kV	-15.0 kV	3.5 Apk
COLLECTOR	11.44 kV	* .750 Apk	88% X Ek ±2%		2 Apk
		** .185 Apk			
COLLECTOR	8.58 kV	* 1.220 Apk	66% X Ek ±2%		3.5 Apk
		** .210 Apk			
COLLECTOR	4.69 kV	* .420 Apk	41% X Ek ±2%		3.5 Apk
		** 2.505 Apk			

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SAT POWER (dB)
2.7	5250	4000	39
3.2	6450	4000	43
3.7	7080	4000	45
4.2	9350	4000	49
4.9	11750	4000	48
5.4	10000	4000	43
5.7	5400	4000	37

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITHOUT EQUALIZER.

\* WITH RF DRIVE \*\* WITHOUT RF DRIVE \*\*\* AT RATED POWER OUTPUT

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.55:1	2:1 MAX
OUTPUT VSWR	1.6:1	2:1 MAX
GRID CAPACITANCE	45 pF	50 pF
DUTY CYCLE	—	4% MAX
MAXIMUM PULSEWIDTH	—	150 μsec
PRIME POWER	1200 W	1500 W MAX
SECOND HARMONIC ***	-7.7	-6 dBc
TEMPERATURE RANGE	—	-40° to 85°C
NOISE POWER DENSITY	-24 dBm/MHz	-20 dBm/MHz

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.

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

An ISO 9001:2000 Quality System  
 Certified Company

08/09