



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. MEC 5493

18.0 to 27.0 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	0.7 A	-5.8 Vdc	-6.4 Vdc	1.5 A
HELIX	W/ RF	GROUND	GROUND	GROUND	4 mA
	W/O RF				
		0.5 mA			
FE ON	-6.3 Vdc	0.1 mA	0	-40 Vdc	1 mA
FE OFF	-800 Vdc	0.1 mA	-800 Vdc	-1200 Vdc	0.2 mA
CATHODE (Ek)	-10.7 kV	130 mA	-10.3 kV	-10.8 kV	140 mA
COLLECTOR W/ RF	#1	5.35 kV	30 mA	50% x Ek ±2%	75 mA
	#2	2.70 kV	100 mA	25% x Ek ±2%	140 mA

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN OPERATING POWER OUTPUT (WATTS)	TYP GAIN AT SAT POWER dB
18.0	80	50	26
19.0	80	50	26
20.0	80	50	27
21.0	100	50	27
22.0	100	50	28
23.0	100	50	28
24.0	100	50	28
25.0	100	50	28
26.0	80	50	27
27.0	80	50	27

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

NOTE 2: HEATER, COLLECTOR AND FOCUS ELECTRODE (FE) VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.

NOTE 3: CAN BE MADE AVAILABLE WITH INTEGRATED SSM.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.25:1	2:1
OUTPUT VSWR	1.75:1	2:1
MAXIMUM DUTY	—	CW
FE CAPACITANCE	50 pF	60 pF
MIN HARMONIC SEPARATION	-8 dBc	-6 dBc *
NOISE POWER DENSITY	-35 dBm/MHz	-30 dBm/MHz
PRIME POWER	500 W	600 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

01/06