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MODEL NO. MEC 5450X (FE)

7.9 TO 8.4 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-5.8 Vdc	1.62 A	-5.8 Vdc	-6.6 Vdc	2 A
HELIX	W/ RF	GROUND	GROUND		10 mA
	W/O RF				
FE ON	-6 Vdc	0.1 mA	0	-10 Vdc	1 mA
FE OFF	-1300 Vdc	0.1 mA	-1300 Vdc	-1500 Vdc	1 mA
CATHODE (Ek)	-10.95 kV	340 mA	-10.5 kV	-11.1 kV	345 mA
COLLECTOR W/ RF	#1	6.68 kV	80 mA	61% x Ek ±2%	
	#2	4.38 kV	258 mA	40% x Ek ±2%	

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
7.900	630	600	46
8.200	630	600	46
8.400	630	600	46

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITH EQUALIZER.

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

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

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2.3:1	2.5:1
OUTPUT VSWR	1.8:1	2:1
MAXIMUM DUTY	—	CW
FE CAPACITANCE	50 pF	65 pF
MIN HARMONIC SEPARATION	-20 dBc	-15 dBc
NOISE POWER DENSITY	-16 dBm/MHz	-14 dBm/MHz
PRIME POWER	1700 W	1750 W
TEMPERATURE RANGE	-40° to 85°C	—

SPECTRAL REGROWTH: USING A TELEDYNE APPROVED LINEARIZER

FREQUENCY	MINIMUM LINEAR POWER	MODULATION	LEVEL@1 SYMBOL RATE.
7.9 GHz	380W	OQPSK	-30dBc
8.4 GHz	380W	OQPSK	-30dBc

An ISO 9001:2000 Quality System
 Certified Company

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