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This model number is subject to the jurisdiction of the U.S. Department of Commerce.

MODEL NO. MEC 5452 (FE)
 MEC 5455 (GR)
 13.75 to 14.5 GHz

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6.3 Vdc	1.6 A	-5.8 Vdc	-6.6 Vdc	2 A
HELIX	W/ RF	GROUND	GROUND		10 mA
	W/O RF				
		0.5 mA			
FE ON	-35 Vdc	0.3 mA	0	-75 Vdc	1 mA
FE OFF	-1300 Vdc	0.05 mA	-1300 Vdc	-1500 Vdc	1 mA
GRID ON	160 Vdc	0.1 mA	125 Vdc	250 Vdc	10 mA
GRID OFF	-250 Vdc	0.02 mA	-250 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-10.3 kV	320 mA	-10 kV	-10.8 kV	320 mA
COLLECTOR W/ RF	#1 5.5 kV	88 mA	54% x Ek ±2%		100 mA
	#2 3.4 kV	226 mA	33% x Ek ±2%		320 mA

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
13.75	510	500 *	60
14.0	510	500 *	60
14.1	510	500	60
14.2	520	500	60
14.3	520	500	60
14.4	520	500	60
14.5	510	500	60

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.

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	1.38:1	1.5:1
OUTPUT VSWR	1.45:1	1.7:1
MAXIMUM DUTY	—	CW
FE CAPACITANCE	50 pF	65 pF
GRID CAPACITANCE	37 pF	50 pF
MIN HARMONIC SEPARATION	-30 dBc	-15 dBc*
NOISE POWER DENSITY	-7 dBm/MHz	-5 dBm/MHz
PRIME POWER	1320 W	1450 W
TEMPERATURE RANGE	-40° to 85 °C	—

An ISO 9001:2000 Quality System
 Certified Company

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