

TYPICAL OPERATING CONDITIONS			POWER SUPPLY REQUIREMENTS		
ELEMENT	VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER	-6 Vdc	1.6 A	-5.8 Vdc	-6.6 Vdc	2 A
HELIX	W/ RF	GROUND	GROUND	GROUND	10 mA
	W/O RF				
GRID ON	200 Vdc	0.5 mA	100 Vdc	250 Vdc	5 mA
GRID OFF	-250 Vdc	0.1 mA	-250 Vdc	-500 Vdc	1 mA
CATHODE (Ek)	-10.7 kV	300 mA	-10 kV	-11 kV	325 mA
COLLECTOR	#1	5.99 kV	75 mA	56% x Ek ±2%	150 mA
	#2	4.28 kV	220 mA	40% x Ek ±2%	325 mA

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN *** LINEAR POWER OUTPUT (WATTS)	TYP GAIN AT LINEAR POWER dB
5.85	445	282 *	41
6.15	445	282 **	41
6.45	445	282	39

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS WITH EQUALIZER.

*** SPECTRAL REGROWTH (QPSK MODULATION) MEASURED AT ONE SYMBOL RATE SHALL BE NO GREATER THAN -26dBc.

- NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.
 NOTE 2: HEATER, COLLECTOR AND GRID VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.
 NOTE 3: CURRENTS MEASURED AT LINEAR POWER OUTPUT.
 NOTE 4: COLLECTOR VOLTAGE OPTIMIZED FOR LINEAR PERFORMANCE.
 HELIX CURRENT WILL EXCEED MAX IF TWT DRIVEN TO SATURATION.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2.4:1	2.5:1
OUTPUT VSWR	1.5:1	1.6:1
THIRD ORDER INTERCEPT	61 dBm	—
GRID CAPACITANCE	37 pF	65 pF
MIN HARMONIC SEPARATION	-15 dBc	-10 dBc *
NOISE POWER DENSITY	-12 dBm/MHz	-10 dBm/MHz
PRIME POWER	1459W **	1500W **
TEMPERATURE RANGE	-40° to 85°C	—

An ISO 9001:2000 Quality System
 Certified Company

01/04