UHF TRIODES AND SPECIAL PURPOSE TUBES - MAXIMUM RATINGS

TYPE NO.	Filament		Plate Dissipation	Mu	Transcon-ductance	Plate		Power Output Characteristics	Max. Fre
	Volts	Amps	Watts		(micromhos)	Volts	Amps		mc/sec
6Q4/EC80	6.3	0.45	4	30	12,000	550	0.015	15 db gain at 300 mc (Bandwidth 4.5 mc)	500
6R4/EC81	6.3	0.24	5	16	5,500	300	0.0277	Power Output 1.1 w at 750 mc	1200
EA52	6.3	0.3	–	–	–	1000 V at <100 mc $1000 \times \frac{fo^{\ddagger}}{f}$ at >100 mc	0.0003	–	1000
EFP60	6.3	0.37	2	–	25,000	300	0.020	–	–
DX144	6.3	0.65	10	43	19,000	Max. Plt. volts	Max. Avg. Cath. Current - Amp.	0.5 w at 4000 mc	4000
						300	0.035		
DX145	6.3	0.65	10	43	19,000	300	0.070	1.8 w at 4000 mc	4000
5847	6.3	0.3	3.0	–	12,500	180	0.35	–	–
E91H/6687	6.3	0.27	OPERATING CHARACTERISTICS With either control at -10 volts and plate voltage at 150 volts, the plate curren less than 0.2 mA. With both control grids at 0 volts, the plate current is nomin						

‡ fo = 100 mc.

KLYSTRONS - FIXED FREQUENCY‡

TYPE NO.	Frequency Range** (mc)	Power Output (watts)	Filament		TYPICAL				
			Voltage (volts-AC or DC)	Current (amps)	Frequency (mc)	Anode Voltage (volts-DC)	Grid Voltage	Beam Current (ma)	Power Output (watts
DX-122	8500-10,500	5	9.0 - 11.0	0.8-1.2	9,300	2750	0	35	5
DX-123	8500-10,500	20-35	9.0 - 11.0	0.8-1.2	9,700	4350	0	71	33
DX-124	8500-10,500	100-200	9.0 - 11.0	0.8-1.2	10,000	8800	0	180	210

‡ More detailed information available on request. **These tubes are available at any fixed frequency in the rang

REFLEX KLYSTRONS

TYPE NO.	Max. Frequency Range (mc)	Frequency (mc)	Wavelength (cm)	TYPICAL			
				Power Output (mw)		Reflector Potential (Volts-D.C.)	Beam Voltage (Volts-D.C.)
				Ave.	Min.		
2K25	8500-9660	9370	3.21	32	20	-128 to -183	300

Capacitances in $\mu\mu f$			DESCRIPTION	TYPE NO.
G-P	Input	Output		
0.06	5.4	3.4	Radiation-cooled triode, button type base, indirectly heated cathode. For use as amplifier and mixer up to 500 mc. Ideally suited for UHF television, baloon sondes, measuring equipment, etc.	6Q4/EC80
1.5	1.7	0.5	Radiation-cooled triode, standard button base, indirectly heated cathode. Used as oscillator up to 1200 mc. High efficiency at high frequencies.	6R4/EC81
-	$\leq$0.5	-	Disc-seal, vacuum diode for UHF voltmeters and monitoring devices. Anode pin connection adaptable for use as probe contact.	EA52
0.004	9.2	6	Secondary emission pentode for wide band amplifier application where stability and high ratio of transconductance to capacities is important. Used in high speed computer service and high quality TV applications.	EFP60
1.6	3.3	0.04	Disc-seal triode, indirectly heated. Features "L" type, high emission, long life cathode. For frequencies up to 4000 mc. General purpose, low level amplifier.	DX144
1.6	3.3	0.04	Same as DX144 except higher current rating	DX145
0.05	7.0	2.5	High-gain miniature pentode with high figure of merit. For broad-band applications. Plug-in replacement for Western Electric 404A.	5847
will be ly 5.75 mA.			Dual control heptode for use as gated amplifier in computer and "on-off" control circuits. Direct replacement for 5915A.	E91H/6687

OPERATION				DESCRIPTION	TYPE NO.
Electronic * Tuning (KC/sec./volt)	Temp. Coefficient (mc/sec./°C)	Pulling Figure (mc/sec.)	Output Connector		
10	0.2	10	Waveguide RG-52U	The quietest, CW, high-power microwave generators available on the market. Microphonic effects are orders of magnitude less than in comparable tubes using flexible diaphragms as a part of the resonant circuit. Feature high power output, excellent frequency stability, very low microphonics and rugged construction. Require no mechanical adjustment, are simple to operate, easily modulated AM or FM and have minimum life expectancy of 1000 hours due to use of a new, impregnated cathode. No instruments required to align the tubes or to peak the operation. Tubes deliver rated output at rated frequency on application of potentials. Base connections are made directly on stem pins. Water-cooled (approx. 1/2 gal. per minute.) Size - approx. 7-1/2 x 4-5/8 x 2 inches.	DX-122
7.5	0.2	10	Waveguide RG-52U		DX-123
5.0	0.2	10	Waveguide RG-52U		DX-124

indicated; tolerance ±20 mc. *Tube may also be grid modulated, AM or FM.

OPERATION			Type of Cavity	Type of Tuning	Type of Output Coupling	Base	TYPE NO.
Electronic Tuning E.Ref./$\frac{P.O.}{2}$ (mc)	Max. Thermal Drift mc/C°	Fil. Current at 6.3V. (amps)					
55 Average	0 to -0.2	0.440	Self Contained	Mechanical Capacitive	Waveguide RG-52U	Modified Standard Octal	2K25