

RECTIFIERS — DIODES

TYPE NO.	FILAMENT		Fil. Heating Time (sec)	Tube Drop (Volts)	Peak Inverse Anode Volts (Volts)	ANODE CURRENT		Surge Current	TEMPER- ATURE
	Volts	Amps				Peak Amps	Average Amps	Amps	Ambient
3B-28	2.5	5.0	5	10.0	10,000	1.0	0.250	—	—
4B-32	5.0	7.5	30	10.0	10,000	5.0	1.25	50.0	—
249-B	2.5	7.5	15	15.0	7,500	2.5	0.640	—	—
575-A	5.0	10.0	30	10.0	15,000	6.0	1.5	60.0	—
673	5.0	10.0	30	10.0	15,000	6.0	1.5	60.0	—
857-B	5.0	30.0	60	10.0	22,000	40.0	10.0	400.0	—
866-AX	2.5	5.0	20	10.0	10,000	1.0	0.250	—	—
869-B	5.0	18.0	60	10.0	20,000	10.0	2.50	—	—
869-BL	5.0	18.0	60	10.0	20,000	10.0	2.50	—	—
872-AX	5.0	7.5	30	10.0	10,000	5.0	1.25	50.0	—
6339	6.3	1.5	30	—	WITH LIQUID COOLING				
					16,000 10,000	0.250 0.400	0.065 0.100	—	−65 to +165°
					WITHOUT COOLING — AIR OPERATION				
6508	5.0	12.5	90	12.0	12,000	0.200	0.050	—	−55 to +85°
					21,000	10.0	2.5	100.0	—
6693	5.0	11.5	60	12.0	2,500 15,000	10.0 12.0	5.0 3.0	200.0 120.0	+15 to +55° +15 to +35°
7136	5.0	11.5	60	12.0	15,000	12.0	2.5	120.0	+15 to +35°
8008-AX	5.0	7.5	30	10.0	10,000	5.0	1.25	50.0	—
8020-AX	5.0	6.0	5	200V at 100ma	40,000	0.750	0.100	—	—

MICROWAVE TRIODES

TYPE NO.	FILAMENT		Plate Dissipation (Watts)	Mu	Trans- conductance (micromhos)	PLATE		POWER OUTPUT CHARACTERISTICS			
	Volts	Amps				Volts	Amps	Power (Watts)	Gain (DB)	Bandwidth (mc)	Frequency (mc)
5861/EC55	6.3	0.4	10	30	6,000	250	0.020	2.8	OSC	OSC	1,000
								0.5	OSC	OSC	3,000
8108	6.3	0.73	10	43	21,000	180	0.060	1.8	8	50-0.1 db	4,000
								0.5	13	50-0.1 db	4,000
								0.5	19	25-3.0 db	3,000
								0.25	0	Doubler	6,000
EC158	6.3	0.85	30	30	25,000	180	0.140	5	8	50-0.1 db	4,000
								2	12	50-0.1 db	4,000

PHOTOMULTIPLIER TUBES

TYPE NO.	Min. Useful Photocathode Diameter (mm)	Number of Stages	Base	Maximum Spectral Response (Angstroms)	Reso- lution C e 137	Minimum Photocathode Sensitivity (μ A/lm)	Average Photocathode Sensitivity (μ A/lm)	Minimum Anode Sensitivity (A/lm)	For a Supply Voltage of (V)	Minimum Gain at 2000 V
150 AVP*	32	10	duodecal	4200		25	50	60	1800	—

*See XP1010

	RANGE (°C)	DESCRIPTION	TYPE NO.
	Mercury		
	—	Xenon gas filled half-wave rectifier with wider temperature ranges than mercury-vapor tubes. Used largely by armed services to replace 866-A's.	3B-28
	—	Xenon gas filled half-wave rectifier with wider temperature ranges than mercury-vapor tubes. Used largely by armed services to replace 872-A's.	4B-32
	+25 to +70°	Convection-cooled mercury-vapor half-wave rectifier. Used in most Western Electric r-f equipment.	249-B
	+20 to +50°	Convection-cooled mercury-vapor half-wave rectifier. Refer to 7136 for improved version.	575-A
	+20 to +50°	Convection-cooled mercury-vapor half-wave rectifier. Refer to 6693 for improved version.	673
	+30 to +40°	Mercury-vapor half-wave rectifier with low voltage drop. Extremely popular in most high power broadcasting stations. Convection cooled.	857-B
	+25 to +70°	Mercury-vapor half-wave rectifier of Amperex own design. More rugged trouble-free operation at only slight additional cost. Convection cooled.	866-AX
	+30 to +40°	Mercury-vapor half-wave rectifier. Refer to type 6508, economy version.	869-B
	+30 to +40°	Electrically same as 869-B. Base has flexible filament leads with spade lugs for better, low-resistance contact with socket.	869-BL
	+20 to +60°	Mercury-vapor half-wave rectifier. Universally used by almost every user and designer of H-V equipment. Convection cooled.	872-AX
	—	High vacuum clipper diode and rectifier. Miniature version of 3B29 for liquid immersion cooling or air operation.	6339
	—		
	+25 to +45°	Mercury vapor rectifier for relatively high voltage and current. A high quality, long-life tube priced lower than any tube in its class on the market.	6508
	+25 to +75° +25 to +55°	Single-anode, mercury vapor rectifier with ratings, intermediate between standard types 575A and 869B. Delivers 9 amps up to 12 KV in a full wave, 3 phase power supply. Three tubes in a three phase half-wave power supply deliver 6 KV at 9 amps using only one filament transformer. Has large contact area, industrial base preventing base contact oxidation. Priced low for replacement market and original equipment.	6693
	+25 to +55°	Single anode, mercury vapor, high voltage rectifier. Plate current ratings intermediate between types 575-A and 6693. Cathode and anode design similar to 6693 but with 575-A base. Recommended replacement for 575-A in older equipment. For new equipment design, the 6693 is recommended.	7136
	+20 to +60°	Mercury-vapor half-wave rectifier similar to 872-A characteristics; with heavy long pin industrial base. Used by armed services and in commercial applications. Convection cooled.	8008-AX
	—	Half-wave, high vacuum rectifier with high inverse voltage and low average current. Used in radar and precipitator power supplies.	8020-AX

CAPACITANCES (pf)				Maximum Frequency (mc)	DESCRIPTION	TYPE NO.
G-P	Input	Output				
1.3	1.8	0.03		3,000	Disc-seal triode, for amplifier and oscillator applications.	5861/EC55
1.4	3.0	0.035		> 6,000	Disc-seal triode, for amplifier, oscillator doubler or tripler applications. Long life.	8108
1.75	4.0	0.055		> 6,000	Disc-seal triode, for amplifier, oscillator doubler or tripler applications. Long life.	EC158

Average Anode Sensitivity (A/lm)	For a Supply Voltage of (V)	Maximum Direct Dark Current (nA)	For an Anode Sensitivity of (A/lm)	Or a Gain of	Maximum Anode Dissipation (W)	Ratio Luminous Flux/Anode Current Linear up to		TYPE NO.
						(voltage distri- bution A, see instr. for use) (ma)	(voltage distri- bution B, see instr. for use) (ma)	
300	1800	50	60	—	0.5	30	100	150 AVP