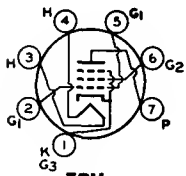
Full-Wave Rectifier

MAXIMUM RATINGS (Design-Center Values)				
Peak Inverse Plate Voltage			1000	volts
Peak Plate Current (Per Plate)			450	mA
AC Plate Supply Voltage (Per Plate, rms) with Capacitor Input to Filter			350	volts
Average Output Current			150	mA
Hot Switching Transient Plate Current (Per Plate)			#	
Peak Heater-Cathode Voltage			—500	volts
TYPICAL OPERATION WITH CAPACITOR INPUT TO FILTER				
AC Plate-to-Plate Supply Voltage (rms)	500	600	700	volts
Filter-Input Capacitor	50	50	50	μF
Total Effective Plate Supply Impedance per Plate	150	200	240	ohms
DC Output Voltage at Input to Filter (Approx.) For dc output current of 150 mA	245	293	347	volts

When capacitor-input circuits are used, a maximum peak current value per plate of 1 ampere during the initial cycles of the hot-switching transient should not be exceeded.



7CV

6CA5

BEAM POWER TUBE

12CA5, 25CA5

Miniature type used in af power output stage of radio and television receivers. Outlines section, 5D; requires miniature 7-contact socket. Types 12CA5 and 25CA5 are identical with type 6CA5 except for heater ratings.

	6CA5	12CA5	25CA5	
Heater Voltage (ac/dc)	6.3	12.6	25	volts
Heater Current	1.2	0.6	0.3	ampere
Heater Warm-up Time (Average)	—	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	+200 —300 max	±200 max	volts
Average value	100 max	+100 —200 max	100 max	volts

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Center Values)			
Plate Voltage		130	volts
Grid-No.2 (Screen-Grid) Voltage		130	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value		0	volts
Plate Dissipation		5	watts
Grid-No.2 Input		1.4	watts
Bulb Temperature (At hottest point)		180	°C
TYPICAL OPERATION			
Plate Voltage	110	125	volts
Grid-No.2 Voltage	110	125	volts
Grid-No.1 (Control-Grid) Voltage	—4	—4.5	volts
Peak AF Grid-No.1 Voltage	4	4.5	volts
Zero-Signal Plate Current	32	37	mA
Maximum-Signal Plate Current	31	36	mA
Zero-Signal Grid-No.2 Current (Approx.)	3.5	4	mA
Maximum-Signal Grid-No.2 Current (Approx.)	7.5	11	mA
Plate Resistance (Approx.)	16000	15000	ohms
Transconductance	8100	9200	μmhos
Load Resistance	3500	4500	ohms
Total Harmonic Distortion	5	6	per cent
Maximum-Signal Power Output	1.1	1.5	watts
MAXIMUM CIRCUIT VALUES			
Grid-No.1-Circuit Resistance:			
For fixed-bias operation		0.1	megohm
For cathode-bias operation		0.5	megohm

Refer to chart at end of section.