

POWER TRIODE

805

Thoriated-tungsten-filament type used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 30 Mc. For operation at 45 Mc,

plate voltage and plate input should be reduced to 82 per cent of maximum ratings; at 80 Mc, to 55 per cent. Class C Telegraphy maximum CCS plate dissipation, 125 watts. Requires Jumbo four-contact socket and may be mounted in vertical position with base down, or in horizontal position with pins 1 and 3 in vertical plane. **OUTLINE 51, Outlines Section.** Plate shows no color when tube is operated at maximum CCS ratings.

FILAMENT VOLTAGE (AC/DC).....	10	volts
FILAMENT CURRENT.....	3.25	amperes
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate.....	6.0	μf
Grid to filament.....	7.6	μf
Plate to filament.....	9.0	μf

AF POWER AMPLIFIER AND MODULATOR—Class B

Maximum CCS Ratings:

DC PLATE VOLTAGE.....	1500 <i>max</i>	volts
MAXIMUM-SIGNAL DC PLATE CURRENT [■]	210 <i>max</i>	ma
MAXIMUM-SIGNAL PLATE INPUT [■]	315 <i>max</i>	watts
PLATE DISSIPATION [■]	125 <i>max</i>	watts

Typical Operation (Values are for 2 tubes):

DC Plate Voltage.....	1250	1500	volts
DC Grid Voltage.....	0	-16	volts
Peak AF Grid-to-Grid Voltage.....	235	280	volts
Zero-Signal DC Plate Current.....	148	84	ma
Maximum-Signal DC Plate Current.....	400	400	ma
Effective Load Resistance (Plate to plate).....	6700	8200	ohms
Maximum-Signal Driving Power (Approx.).....	6	7	watts
Maximum-Signal Power Output (Approx.).....	300 ^{††}	370 [†]	watts

■ Averaged over any audio-frequency cycle of sine-wave form.

†† With 4 per cent harmonic distortion.

† With 3 per cent harmonic distortion.

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy#

and

RF POWER AMPLIFIER—Class C FM Telephony


Maximum CCS Ratings:

DC PLATE VOLTAGE.....	1500 <i>max</i>	volts
DC GRID VOLTAGE.....	-500 <i>max</i>	volts
DC PLATE CURRENT.....	210 <i>max</i>	ma
DC GRID CURRENT.....	70 <i>max</i>	ma
PLATE INPUT.....	315 <i>max</i>	watts
PLATE DISSIPATION.....	125 <i>max</i>	watts

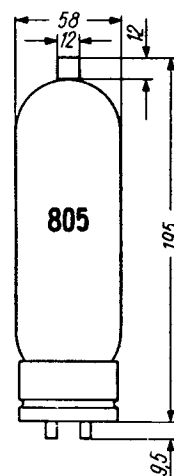
Typical Operation:

DC Plate Voltage.....	1000	1250	1500	volts
DC Grid Voltage.....	-95	-100	-105	volts
Peak RF Grid Voltage.....	225	230	235	volts
DC Plate Current.....	200	200	200	ma
DC Grid Current (Approx.).....	40	40	40	ma
Driving Power (Approx.).....	8.5	8.5	8.5	watts
Power Output (Approx.).....	130	170	215	watts

Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

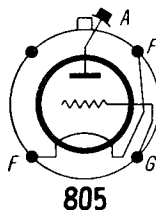
T.		U_f V	I_f A	Cl.	U_a V	U_g V	I_a mA	I_g mA	$U_{g\approx}$ V	P_{dr} W	$R_{a/a}$ k Ω	P_o W	P_{in} W	P_a W
805	amer	10	3,25	C-Tgr	1000	— 95	200	40	225	8,5		130		
					1250	—100	200	40	230	8,5		170		
					1500	—105	200	40	235	8,5		215		
					1500	—500	210	70	maximum				315	125
				C-Tlf A-Mod	1000	—155	160	60	295	16		110		
					1250	—160	160	60	300	16		140		
					1250	—500	175	70	maximum				220	85
				B-Tlf	1250	0	135	15	75	11		55		
					1500	— 10	115	15	70	7,5		57,5		
					1500		150		maximum				185	125
				B (\approx) Mod	1250	0	148 ÷ 400		235	6	6,7	300		
					1500	— 16	84 ÷ 400		280	7	8,2	370		
					1500		210		maximum (x2)				315	125

$S = 4,8 \text{ mA/V}; \mu = 50; f_{(max)} = 30 \text{ MHz}$

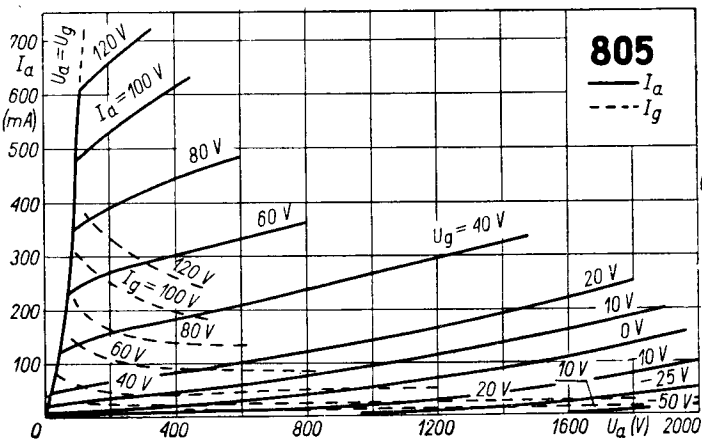
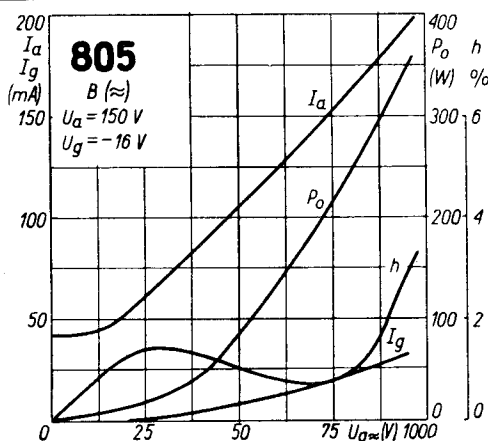



Equivalents

C 805	amer	UE-805	UE
DR-805	DR	UE-905	UE
GL-805	GE	WL-805	Wst
ML-805	Mch	57	Ray
RK 57	Ray	331 A	WE
T-805	Tay	505	UE



C_g	C_a	$C_{g/a}$	Q
pF	pF	pF	
8,5	10,5	6,5	WTh



T.		U_f V	I_f A	Cl.	U_a V	U_g V	I_a mA	I_g mA	$U_{g\approx}$ V	P_{dr} W	R_g k Ω	$R_o(R_{a/a})$ k Ω	P_o W	P_{in} W	P_a W
DET 16	Eng	1	10	5,5	3000	—375	125	25				15	250		125
					1000	0	160 ÷ 460	60	200			(5)	350		92
					1000		125								
					3000										125
DET 17	Eng	2	10	5	C-Tgr	1500	—140	200	35	260	12	4	210		90
						2000	—150	200	30	270	10	5	300		100
						2000		250	60	maximum				500	125
						1200	—130	140	30	230	10		115		53
				C-Tlf A-Mod	1600	—170	140	26	270	10		5,6	164		60
					1600		200	60	maximum					224	82
					1500	— 50	110	3,5	80	10		3,2	55		110
				B-Tlf	2000	— 65	90	2	80	7,5		4,5	65		115
					2000		150	60	maximum					185	125
					2000		62,5		maximum						125
					2000				maximum						

$S = 6,5 \text{ mA/V}; \mu = 61$
maximum $f = 30 \text{ MHz}$

$S = 4,8 \text{ mA/V}; \mu = 36$
maximum $f = 25 \text{ MHz}; I_{k(pk)} = 2,5 \text{ A}$