

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	μμf
Grid to filament.....	7.6	μμf
Plate to filament.....	9.0	μμf

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

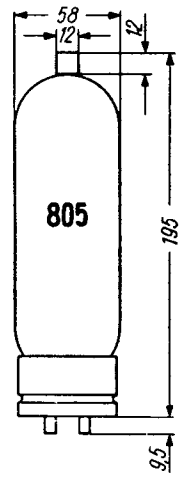
Typical Operation:

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.

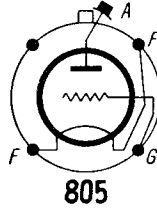
T.		U_f V	I_f A	Cl.	U_a	U_g	I_a	I_g	$U_{g\approx}$	P_{dr}	$R_{a/a}$	P_o	P_{in}	P_a				
					V	V	mA	mA	V	W	k Ω	W	W	W				
805	amer	10	3,25	C-Tgr	1000	-95	200	40	225	8,5		130						
					1250	-100	200	40	230	8,5		170						
					1500	-105	200	40	235	8,5		215						
					1500	-500	210	70	maximum			315	125					
					C-Tif	1000	-155	160	60	295	16		110					
						1250	-160	160	60	300	16		140					
						1250	-500	175	70	maximum			220	85				
					B-Tif	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				
					stat	1500												

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

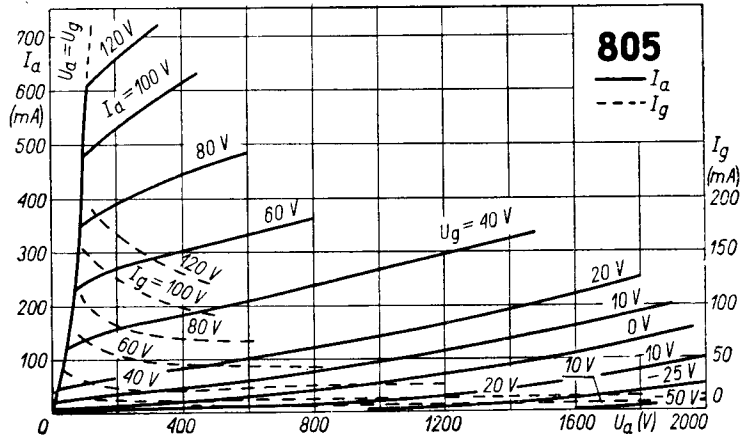
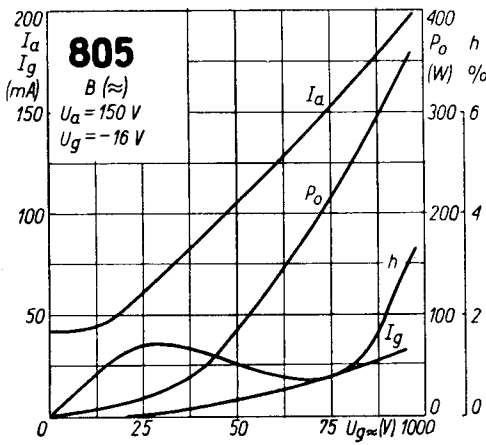


Equivalents

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	U_g	I_a	I_g	$U_{g\approx}$	P_{dr}	R_g	$R_o(R_{a/a})$	P_o	P_{in}	P_a	
					V	V	mA	mA	V	W	k Ω	k Ω	W	W	W	
DET 16	Eng	1	10	5,5	C-Tgr	3000	-375	125	25			15	250		125	
						1000	0	160 ÷ 460	60	200		(5)	350	92		
						1000		125								
						3000										
$S = 6,5 \text{ mA/V}; \mu = 61$														125		
maximum $f = 30 \text{ MHz}$																
DET 17	Eng	2	10	5	C-Tgr	1500	-140	200	35	260	12	4	3,0	210	90	
						2000	-150	200	30	270	10	5	4,5	300	100	
						2000		250	60	maximum			500	125		
						C-Tif	1200	-130	140	30	230	10		4,0	115	53
							1600	-170	140	26	270	10		5,6	164	60
							1600		200	60	maximum			224	82	
						B-Tif	1500	-50	110	3,5	80	10		3,2	55	110
							2000	-65	90	2	80	7,5		4,5	65	115
							2000		150	60	maximum			185	125	
						stat	2000		62,5							
2000				maximum						125						

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