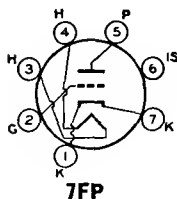


6ER5**3ER5****HIGH-MU TRIODE**

Miniature type with frame grid used in vhf tuners of color and black-and-white television receivers. Outlines section 5C; requires miniature 7-contact socket. Type 3ER5 is identical to type 6ER5 except for heater ratings.

**7FP**

	3ER5	6ER5	
Heater Voltage (ac/dc)	2.8	6.3	volts
Heater Current	0.45	0.18	ampere
Peak Heater-Cathode Voltage	±100 max	±100 max	volts
Direct Interelectrode Capacitances:	Unshielded	Shielded*	
Grid to Plate	0.38	0.36	pF
Grid to Cathode, Heater, and Internal Shield	4.4	4.4	pF
Plate to Cathode, Heater, and Internal Shield	3	4	pF
Grid to Heater	0.28 max	0.28 max	pF
Plate to Cathode	0.24	0.24	pF
Cathode to Grid	3.1	3.1	pF
Heater to Cathode	2.5	2.5	pF

* With external shield connected to cathode except as noted.

Δ With external shield connected to ground.

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Center Values)**

Plate Voltage	250	volts
Grid Voltage, Negative-bias value	50	volts
Cathode Current	20	mA
Plate Dissipation	2.2	watts

CHARACTERISTICS

Plate Voltage	200	volts
Grid Voltage	—1.2	volts
Amplification Factor	80	
Plate Resistance (Approx.)	8000	ohms
Transconductance	10500	μmhos
Plate Current	10	mA
Grid Voltage (Approx.) for transconductance of 500 μmhos	—3.8	volts
Grid Voltage (Approx.) for transconductance of 100 μmhos	—5.6	volts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance	1	megohm
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6ES5

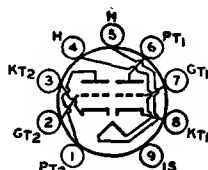
Refer to chart at end of section.

6ES8

Refer to chart at end of section.

**6ES8/
ECC189****VARIABLE-MU TWIN TRIODE**

Miniature type used as cascode-type amplifier in tuners of television receivers. Outlines section, 6B; requires miniature 9-contact socket.

**9AJ**

Heater Voltage (ac/dc)	6.3		volts
Heater Current	0.365		ampere
Direct Interelectrode Capacitances:	Unshielded	Shielded*	
Grid to Plate (Each Unit)	1.9	1.9	pF
Plate to Cathode (Each Unit)	0.18	0.17	pF
Heater to Cathode (Each Unit)	3	3Δ	pF
Plate of Unit No.2 to Plate of Unit No.1	0.04 max	0.015 max	pF
Plate of Unit No.2 to Grid of Unit No.1	0.003 max	0.003 max	pF
Grid of Unit No.1 to Cathode of Unit No.2	0.002 max	0.002 max	pF

* With external shield connected to cathode of unit under test except as noted.

Δ With external shield connected to ground.