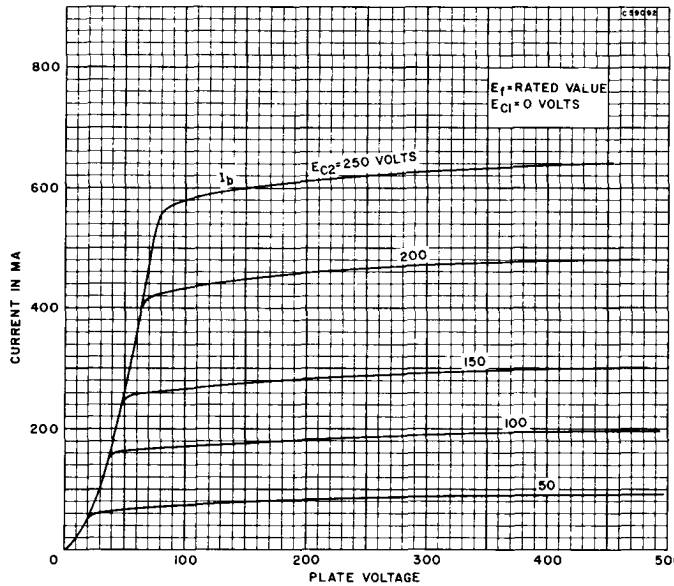
NOTES:

(1) Pin No. 1 omitted on Base No. B6-81 and B6-84.

(2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

(3) In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.

AVERAGE PLATE CHARACTERISTICS



6BQ7A/6BZ7

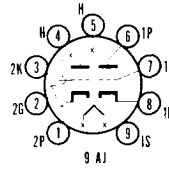
4BQ7A/4BZ7, 5BQ7A, 5BZ7

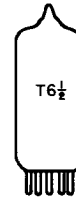
Color Television Type

VHF CASCODE AMPLIFIER

Twin Medium Mu Triode

Construction .....Miniature T-6½
Base .....Button 9 Pin, E9-1
Basing 9AJ
Outline 6-2
Maximum Diameter .....0.875 In.
Maximum Seated Height .....1.938 In.
Maximum Overall Height .....2.188 In.





ELECTRICAL DATA

HEATER OPERATION

	4BQ7A/ 4BZ7	5BQ7A 5BZ7	6BQ7A/ 6BZ7
Heater Voltage	4.2	5.6	6.3 Volts
Heater Current	600	450	400 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak(1)			200 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak			200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)(2)

	Section 1(3)	Section 2(3)
Grid to Plate	1.2	1.2 Pf
Input: g to (h + k + IS)	2.6	5.0(4) Pf
Output: p to (h + k + IS)	1.2	2.2(4) Pf
Plate to Cathode (Max.)	0.12	0.12 Pf
Heater to Cathode	2.6	2.6 Pf
Plate Section 1 to Plate Section 2 (Max.)	0.010	Pf
Plate Section 2 to Plate and Grid Section 1 (Max.)	0.024	Pf

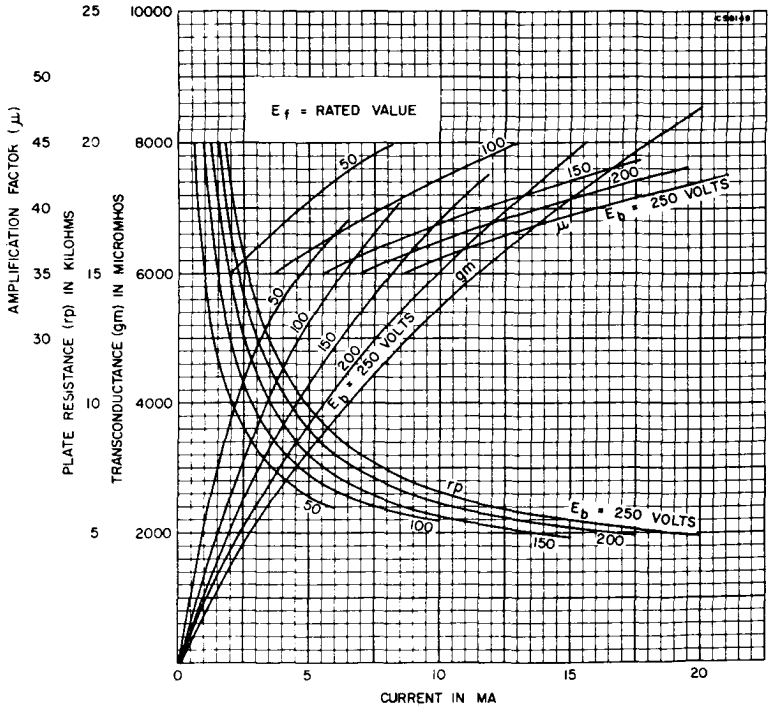
RATINGS (Design Maximum Rating System) (Each Section)

Plate Voltage (Max.)(1)	250 Volts
Plate Dissipation (Max.)	2 Watts
Cathode Current (Max.)	20 Ma
Grid Circuit Resistance (Max.)	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION
Class A1 Amplifier (Each Section)

Plate Voltage	150 Volts
Cathode Bias Resistor	220 Ohms
Plate Current	9 Ma
Transconductance	6400 μmhos
Plate Resistance	5900 Ohms
Amplification Factor	38
Grid Voltage for Ib = 100 μa (Approx.)	–6.5 Volts

NOTES:

(1) Under cutoff conditions, in rf grounded grid circuits with direct coupled drive, this voltage may be as high as 300 volts.
(2) EIA shield No. 315 connected to Pin No. 9.
(3) Section No. 1 connects to Pins 6, 7, and 8. Section No. 2 connects to Pins 1, 2, and 3.
(4) Read as grounded grid amplifier.

AVERAGE TRANSFER CHARACTERISTICS