

Rogers Electronic Tubes & Components

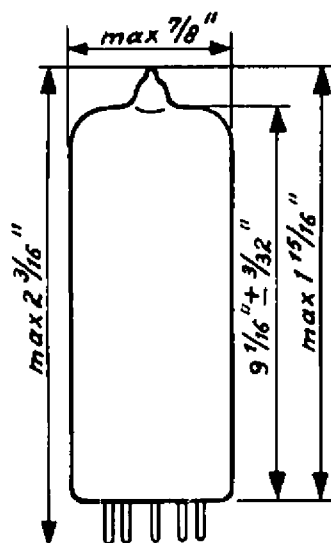
7 DJ 8

Description: Double triode with high transconductance and low noise for use as cascode amplifier in tuners for television receivers

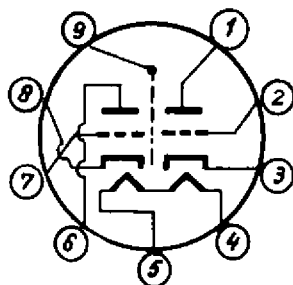
Mechanical data

Cathode	coated, unipotential
Base	E 9-1
Bulb	T 6 ¹ / ₂
Outline	6-2
Basing	9 DE
Mounting position	any

TUBE OUTLINE



BOTTOM VIEW OF BASE



BASE PIN No.

1	Plate	} Grounded-grid output section
2	Grid	
3	Cathode	
4	Heater	} Grounded-cathode input section
5	Heater	
6	Plate	
7	Grid	} Grounded-cathode input section
8	Cathode	
9	Internal shield	

Heater data

Heater voltage	7 volts
Heater current	300 mamps

Direct interelectrode capacitances

without - with
external shield

Grounded-cathode section

Grid to all other elements except plate	3.3	3.3 μ F
Plate to all other elements except grid	1.8	2.5 μ F
Plate to grid	1.4	1.4 μ F
Grid to heater	0.13	0.13 μ F

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from JEDEC release #2382, Feb. 9, 1959

Direct interelectrode capacitances (continued)

	without- external shield	with shield
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Grounded-grid section

Cathode to all other elements except plate	6.0	6.0 μF
Plate to all other elements except cathode	2.8	3.7 μF
Plate to grid	1.4	1.4 μF
Cathode to heater	2.7	2.7 μF
Plate to cathode	0.18	0.16 μF

Between grounded-cathode and grounded-grid section

Plate to plate	max. 0.045	0.015 μF
Grid (grounded-cathode-section) to plate (grounded-grid-section)	max. 0.005	0.005 μF

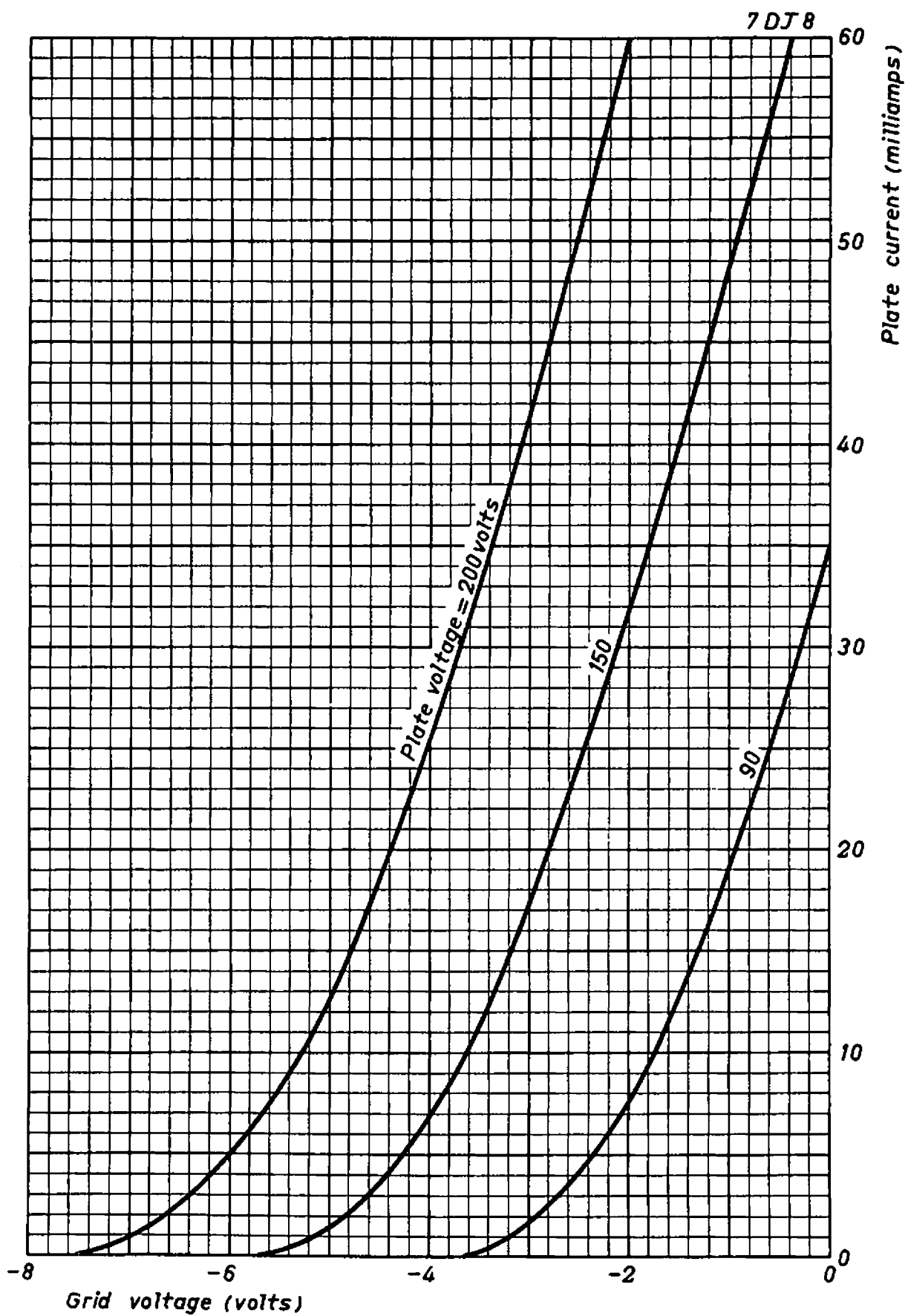
Maximum ratings (each section) (design center values)

Plate voltage (with cold cathode)	550 volts max.
Plate voltage	130 volts max.
Plate dissipation	1.8 watts max.
Cathode current	25 mamps max.
Negative grid voltage	50 volts max.
Grid circuit resistance	1 megohm max.
Voltage between cathode and heater (grounded cathode section)	80 volts rms max.
Peak voltage between cathode and heater (grounded grid section; cathode positive with respect to heater)	180 volts max.
D.C. component of cathode to heater volt- age (grounded grid section)	130 volts max.
Circuit resistance between heater and cathode	20.000 ohms max.

Typical characteristics (each section)

Plate voltage	90 volts
Grid bias	-1.3 volts
Plate current	15 mamps
Transconductance	12500 micromhos
Amplification factor	33
Equivalent noise resistance	300 ohms

Remark: In order not to exceed the maximum permissible plate voltage when the cascode amplifier is controlled, it is necessary to use a voltage divider for the grid of the grounded-grid section. With grid current biasing for the grounded-cathode section the plate voltage across this section should not exceed 75 volts in the not-controlled condition.



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