

INDEX=LARGE LUG
●=PIN CUT OFF
12AQ

6DS4

2DS4

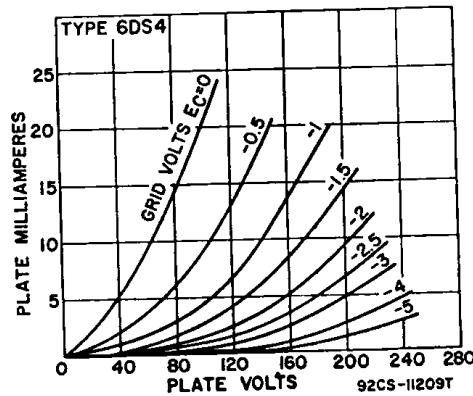
HIGH-MU TRIODE

Nuvistor type used as grounded-cathode, neutralized rf amplifier in vhf tuners of color and black-and-white television and FM receivers. Outlines section, 1; requires nuvistor socket. Type 2DS4 is identical with type 6DS4 except for heater ratings.

	2DS4	6DS4	
Heater Voltage (ac/dc)	2.1	6.3	volts
Heater Current	0.45	0.135	ampere
Heater Warm-up Time (Average)	8	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	volts
Direct Interelectrode Capacitances (Approx.)			
Grid to Plate	0.92		pF
Grid to Cathode, Heater, and Shell	4.3		pF
Plate to Cathode, Heater, and Shell	1.8		pF
Plate to Cathode	0.18		pF
Heater to Cathode	1.6		pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)			
Plate Supply Voltage	300°		volts
Plate Voltage	135		volts
Grid Voltage, Negative-bias value	55		volts
Grid Voltage, Peak positive value	0		volts
Cathode Current	15		mA
Plate Dissipation	1.5		watt
CHARACTERISTICS			
Plate Supply Voltage	110		volts
Grid Supply Voltage	0		volts
Grid Supply Voltage	130		ohms
Cathode-Bias Resistor	63		ohms
Amplification Factor	7000		ohms
Plate Resistance (Approx.)	9000		μmhos
Transconductance	6.5		mA
Plate Current	—5		volts
Grid Voltage (Approx.) for plate current of 100 μA	—6.8		volts
Grid Voltage (Approx.) for plate current of 10 μA			



TYPICAL OPERATION

Plate Voltage	70	volts
Grid Supply Voltage	0	volts
Grid Resistor	47000	ohms
Amplification Factor	68	
Plate Resistance (Approx.)	5440	ohms
Transconductance	12500	μmhos
Plate Current	7	mA

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:*		
For fixed-bias operation	0.5	megohm
For cathode-bias operation	2.2	megohm

* A plate supply voltage of 300 volts may be used provided a sufficiently large resistor is used in the plate circuit to limit the plate dissipation to 1.5 watts under any condition of operation.

▪ For operation at metal-shell temperatures up to 125°C.