



ELECTRONIC TUBE REFERENCE

6049

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Premium subminiature semi-remote-cutoff RF pentode designed for UHF amplification under severe shock, vibration and elevated-temperature conditions. Sylvania specifies long-life, stable performance and ruggedized construction.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8DL	BASE PINS	8
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8DL - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G1	A	G1 – Control Grid	CONNECTED
PIN2 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN2 – K	A	K – Cathode	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN4 – K	A	K – Cathode	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN6 – H	–	H – Heater	CONNECTED
PIN7 – G2	A	G2 – Screen Grid	CONNECTED
PIN8 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN8 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.00355 S
MAXIMUM PLATE VOLTAGE	165 V
MAXIMUM SCREEN VOLTAGE	155 V
MAXIMUM PLATE DISSIPATION	1.1 W
MAXIMUM SCREEN DISSIPATION	0.55 W
MAXIMUM CATHODE CURRENT	16.5 mA
<i>Sylvania 6049 subminiature semi-remote-cutoff UHF RF pentode, not sharp-cutoff; rugged 8DL eight-flexible-lead E8-10 base for impact/vibration/high-temperature service. Heater 6.3 V 150 mA. Absolute maximums: plate 165 V, screen 155 V, plate dissipation 1.1 W, screen dissipation 0.55 W and cathode current 16.5 mA. Typical at V_a 100 V, screen 100 V and cathode resistor 150 ohms: I_a 7.5 mA, I_{g2} 2.5 mA, transconductance 3550 μmhos (0.00355 S), approximate plate resistance 0.4 MΩ. Shielded capacitances grid-to-plate 0.009 pF max, input 3.6 pF, output 3.8 pF. Manufacturer environmental limits include shock 450g, sustained vibration 2.5g and bulb hottest point 300°C; stabilize rated heater voltage to ensure service life. Characteristic values are typical, not maxima.</i>	

Premium subminiature sharp-cutoff pentode for UHF service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1950 SYLVANIA

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	150 mA	—