

ELECTRONIC TUBE REFERENCE

6DS8

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

HEPTODE-TRIODE

Rogers 6DS8 triode-heptode frequency converter for low-voltage automobile radios, 6.3 V 300 mA heater.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9CA	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9CA - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN1 – 1G4	A	G4 – Fourth Grid	CONNECTED
PIN2 – 1G1	A	G1 – Control Grid	CONNECTED
PIN3 – 1G5	A	G5 – Fifth Grid	CONNECTED
PIN3 – IS	A	IS – Internal Screen	CONNECTED
PIN3 – K	A	K – Cathode	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN8 – 2P	B	P – Plate (Anode)	CONNECTED
PIN9 – 2G1	B	G1 – Control Grid	CONNECTED

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0022 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.8 W
MAXIMUM CATHODE CURRENT	6.5 mA
<i>Rogers 6DS8 triode portion of triode-heptode car-radio converter. Max operating plate 250 V, dissipation 0.8 W, cathode current 6.5 mA. Typical at V_a 25 V I_a 2 mA g_m 0.0022 A/V μ 20; at V_a 12.6 V g_m 0.0014 A/V μ 18.3; at 6.3 V g_m 0.0008 A/V μ 14.6. Separate zero-current supply voltage 550 V, not operating maximum. C_{gp} 1.0 pF, input 2.6 pF, output 2.1 pF.</i>	

SECTION2 Heptode	
MAXIMUM PLATE VOLTAGE	50 V
MAXIMUM CATHODE CURRENT	5 mA
<i>Rogers 6DS8 heptode converter portion. Max operating plate 50 V, cathode current 5 mA, screen grids2/4 max 50 V; zero-current supply 550 V separate. At V_a 25 V and screens 25 V as converter: conversion conductance 450 μmhos, plate current 550 μA, r_p 0.5 MΩ. As RF/IF amplifier at 25 V: transconductance 1500 μmhos (0.0015 A/V), plate current 1.25 mA, r_p 0.2 MΩ. Conversion g_m and amplifier g_m must not be confused; no single promoted g_m. Interelectrode capacitances in Rogers sheet.</i>	

Triode-heptode frequency converter for car-radio receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Rogers

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

1959 ROGERS

Section 1 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Oscillator	—

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Section 2 · Heptode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Frequency converter / mixer	—

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