

Standard Telephones and Cables Limited
BRIMAR VALVE WORKS, FOOTSCRAY, SIDCUP, KENT, ENGLAND

BRIMAR

**R. E. T. M. A.
REGISTRATION DATA**

TYPE 9BR8.

DATE
ISSUED 10th March '58.

from JETEC release #2226, June 23, 1958

TYPE 9BR8

The 9BR8 comprises two electrically independent sections - a triode and a pentode - in the 9 pin miniature construction. Both units are capable of good performance at the higher frequencies. The tube may be used as a local oscillator-pentode mixer for FM or television receivers or in the many combined functions in such receivers. The electrical characteristics are similar to those of the 9U8.

MECHANICAL DATA.

Coated unipotential cathodes - 2.
Outline drawing..... 6-2 Bulb..... T-6 $\frac{1}{2}$
Base..... E9-1 Miniature Button 9-pin
Maximum diameter..... $\frac{7}{8}$ "
Maximum overall length..... 2.3/16"
Maximum seated height..... 1.15/16"
Pin Connections..... Basing
Pin 1 - Triode Grid Pin 6 - Pentode Plate
Pin 2 - Triode Plate Pin 7 - Pentode Grid No.2
Pin 3 - Triode Cathode Pin 8 - Pentode Cathode, Grid No.3, Shield
Pin 4 - Heater Pin 9 - Pentode Grid No.1
Pin 5 - Heater

Mounting position..... Any

ELECTRICAL DATA.Direct Inter-electrode Capacitances.

	With Shield	Without Shield	
Pentode Grid No.1 to pentode plate	.008	0.015max	$\mu\mu\text{F}$
Pentode input	5.0	5.0	$\mu\mu\text{F}$
Pentode output	3.5	2.6	$\mu\mu\text{F}$
Triode grid to triode plate	1.8	1.8	$\mu\mu\text{F}$
Triode grid to cathode	2.5	2.5	$\mu\mu\text{F}$
Triode plate to cathode	1.0	0.4	$\mu\mu\text{F}$
Cathode to heater (either section) approx.	3.0	3.0	$\mu\mu\text{F}$

Ratings - Interpreted according to design centre system

	Triode Unit	Pentode Unit	
Heater voltage		9.45	volts
Maximum heater-cathode voltage:			
Heater negative with respect to cathode			
Total DC and peak	250	250	volts

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R.E.T.M.A. REGISTRATION DATA (CONTINUED)

TYPE 9BR8

	Triode Unit	Pentode Unit	
Heater positive with respect to cathode	100	100	volts
D.C. Total D.C. and Peak	200	200	volts
Maximum plate voltage	300	300	volts
Maximum Grid No.2 voltage		300	volts
Maximum plate dissipation	2.7	2.8	watts
Maximum Grid No.2 dissipation		0.5	watts
Maximum positive D.C. Grid No.1 voltage		0	volts
Maximum positive D.C. grid voltage	0		volts

Typical operating conditions and characteristics.

	Triode	Pentode	
Heater voltage	9.45		volts
Heater current	300		mA
Plate voltage	150	250	volts
Grid No.2 voltage		110	volts
Cathode resistor	56	68	ohms
Transconductance	8,500	5,200	μ mos
Grid No.1 voltage (approx.) for $I_b = 10\mu A$.	-12	-10	volts
Plate current	18	10	mA
Grid No.2 current		3.5	mA
Plate resistance (approx.)	.005	0.40	megohm
Amplification factor	40		