

AMALGAMATED WIRELESS VALVE CO., LTD.

SYDNEY, AUSTRALIA

TYPE 6BV7

DOUBLE DIODE POWER OUTPUT PENTODE

MECHANICAL DATA

Style	. . . . .	miniature
Cathode	. . . . .	coated, unipotential
Bulb	. . . . .	T6 $\frac{1}{2}$
Base	. . . . .	Small button Noval 9 pin
Mounting Position	. . . . .	Any
Maximum Overall Length	. . . . .	2-5/8"
Maximum Seated Length	. . . . .	2-3/8"
Length from Base Seat to Bulb		
Top (excluding tip)	. . . . .	2" $\pm$ 3/32"
Maximum Diameter	. . . . .	7/8"
Basing	. . . . .	9BU
Pin Connections:		
Pin 1	. . Diode Plate	
Pin 2	. . Pentode Plate	
Pin 3	. . Pentode Screen Grid	
Pin 4	. . Heater	
Pin 5	. . Heater	
Pin 6	. . Diode Plate	
Pin 7	. . Cathode and Pentode Suppressor Grid	
Pin 8	. . Pentode Control Grid	
Pin 9	. . Cathode and Pentode Suppressor Grid	

GENERAL CHARACTERISTICS

ELECTRICAL

Heater, for Unipotential Cathode:		
Voltage (A.C. or D.C.)	. . . . .	6.3 volts
Current	. . . . .	0.8 amp.

Direct Interelectrode Capacitances:\*

Pentode Unit:		
Grid to Plate	. . . . .	0.5 uuf. max.
Input	. . . . .	11.5 uuf.
Output	. . . . .	9.5 uuf.
Diode Unit:		
Diode (pin 1) - Diode (pin 6)	. . . . .	.01 uuf. max.
Diode (pin 6) - Pentode Plate	. . . . .	0.3 uuf. max.
Diode (pin 1) - Pentode Plate	. . . . .	0.7 uuf. max.
Diode (pin 6) - Pentode Grid No. 1	. . . . .	0.1 uuf. max.
Diode (pin 1) - Pentode Grid No. 1	. . . . .	0.1 uuf. max.

\*unshielded

ELECTRICAL DATAPentode UnitA.F. Power Amplifier - Class A1

## Maximum Ratings, Design Center Values:

Plate Voltage . . . . .	250 max. volts
Grid No. 2 (Screen) Voltage . . . . .	250 max. volts
Plate Dissipation . . . . .	10 max. watts
Grid No. 2 (Screen) Dissipation . . . . .	2 max. watts
Peak Heater - Cathode Voltage	
Heater Negative with respect	
to Cathode . . . . .	90 max. volts
Heater Positive with respect	
to Cathode . . . . .	90 max. volts

## Typical Operation:

Plate Voltage . . . . .	180	250 volts
Grid No. 2 (Screen) Voltage . . . . .	180	250 volts
Grid No. 1 (Control grid) Voltage . . . . .	-4	-5 volts
Peak A-F Grid No. 1 Voltage . . . . .	3.7	4.3 volts
Zero-Sig. Plate Current . . . . .	20	38 ma
Zero-Sig. Grid No. 2 Current . . . . .	3.5	6.0 ma
Plate Resistance (approx) . . . . .	130,000.	100,000 ohms
Transconductance . . . . .	8,000.	10,000 umhos
Load Resistance . . . . .	8,000.	8,000 ohms
Max.-Signal Power Output . . . . .	2.0	4.0 watts
Max.-Signal Total Harmonic Distortion . . . . .	10	10% approx

DIODE UNITS

## Maximum Ratings, Design Center Values:

Plate Current (for each diode) . . . . .	1.0 max. ma.
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## Typical Operation:

Minimum diode current per plate with an applied d.c. voltage of 10 volts is 0.8 ma.