

## P. 61 A.C. MAINS TRIODE

RATING.						
Heater Voltage	•••	•••		•••	•••	6.3
Heater Current (amps.)	•••	•••	•••	•••	• • •	0.6
Maximum Anode Voltage *Mutual Conductance (mA/V)	•••	•••	•••	•••	•••	250
*Mutual Conductance (mA/V)	• • •	• • •	•••	•••	•••	8.0
*Amplification Factor	• • •	• • •	• • • •	•••		17
Maximum Peak Anode Currer			• • • •	•••		30 4.0
Maximum Anode Watts				. • • •	•••	4.0
*Taken a	at Ea=	100 ; 1	⊑g≕u.			
TYPICAL OPERATION. As	an osc	illator.				
Anode Voltage (approx.)					•••	40
Anode Current (mA.)	•••	•••	•••	•••	•••	4 to 5
INTER-ELECTRODE CAPAC	ITIES.					
*Anode to Earth *Grid to Earth Anode to Grid	•••			•••	4.7	$^{\prime 5}~\mu\mu$ F.
*Grid to Earth			•••	•••	7.0	$\mu \mu F$
Anode to Grid		•••	•••		3.5	$\mu\mu$ F.
						) $\mu\mu$ F.
* "Earth" denotes the remaining lising joined to cathode.	g earth	y pote	ntial e	lectrod	es and	i metai-
DIMENSIONS.						
Maximum Overall Length				•••	•••	88 mm.
Maximum Diameter	•••	• • • •	•••	•••	•••	32 mm.

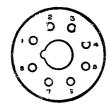
## GENERAL.

The P.61 is an indirectly heated triode particularly suitable for use as an oscillator. The bulb is of small dimensions and metallised. The valve is fitted with a Mazda octal base, the connexions to which are given overleaf.

## APPLICATION.

The valve has been primarily designed for use as an oscillator in television receivers where it is desired to use a frequency changer consisting of an SP.61 with injection into the grid circuit. Under these conditions conversion conductances of the order of 2,700 are obtained with a very much better signal to noise ratio than is obtainable with any other form of frequency changer. It should be realised when designing oscillators for operation at these high frequencies (32 megacycles) that the constants given can only apply to one particular lay-out as very small changes in the disposition of leads or the length of the leads of the oscillator circuit will appreciably affect its performance. This valve may also be used as an oscillator in all-wave receivers where a combined frequency changer is not employed.





## BASING.

Pin No. I. Heater.

2. Cathode.

3. Anode.

4. — 5. Control Grid.

6. Metallising.

7. Omitted.

8. Heater.

Viewed from the free end of the base.

