

# Receiving Valve



RATING.				
Filament Volts				2.0
Filament Amps				0.15
Maximum Anode Volts				150
Maximum Screen Volts				80
*** *** ** **				800
*Mutual A.C. Conductanc		(V)		1.1
*Anode A.C. Resistance (c				727,000
The second secon				
* $at Ea = 120 V.$ ;	Es =	00 V.,	Eg=	<i>J</i> .

### INTER-ELECTRODE CAPACITIES.

Anode to Grid	 	 $0.002 \ \mu\mu F.$
Anode to Cathode	 	 $12.5 \mu \mu F$ .
Grid to Cathode	 	 $9.5 \mu\mu F$ .
DIMENSIONS		

Maximum overall length

128 m.m. 45 m.m. Maximum overall diameter ...

PRICE 20

### GENERAL.

The Mazda S.215A Valve is a 2-volt screened-grid valve of great sensitivity, having an economical anode and screen current consumption. The bulb of the valve is metallised; this feature, in addition to reducing the anode to control grid capacity to an exceptionally low figure, greatly simplifies screening arrangements. The metallised coating is electrically connected to the filament pin No. 3 (see diagram), and must always be at earth potential either by a direct connection or through a non-inductive condenser.

## APPLICATION.

High-frequency amplifier with tuned-anode, tuned-grid or H.F. transformer coupling. Aperiodic coupling may also be employed.

The S.215A has been especially designed for operation with zero grid bias and with a filament current or pre-H.F. volume control. Under normal working conditions the anode current is of the order of only 2mA, and the screen current negligible.

The S.215A may also be used as cumulative-grid or anode-bend detector.



Incorporating the Wiring Supplies, Lighting Engineering and Radio Business of the British Thomson-Houston Co. Ltd., and Metro-Vick Supplies.



### OPERATING VOLTAGES.

Recommended a node volts, 100 to 150. Recommended screen volts, 60 to 80. A non-inductive condenser of at least  $0.1~\mu\mathrm{F}$  should be connected between the screen grid and earth.

#### CURVES

The curves below indicate the performance of an average valve; the amplification factor and mutual conductance were obtained dynamically. It will be seen that the amplification factor is entirely dependent on the anode and screen grid voltages employed.

The mutual conductance is not greatly dependent on the anode voltage but increases with the screen-grid voltage.







