

# EDISWAN

ES.75

## TRIODE POWER AMPLIFIER

ES.75

### GENERAL

The ES.75 is a power valve for use in public address equipment and large power amplifiers in general. It will be found suitable for relay service work where it can be used in place of a number of smaller output valves with a corresponding simplification of circuit. The ES.75 is similar to the ES.75.H, but has a lower amplification factor with a corresponding increase in the grid bias under working conditions. Basing connexions are shown overleaf.

### RATING

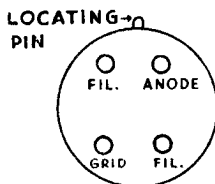
|                                   |                   |                                          |
|-----------------------------------|-------------------|------------------------------------------|
| Filament Voltage (volts)          | $V_f$             | 10.0                                     |
| Filament Current (amps)           | $I_f$             | 4.2                                      |
| Maximum Anode Voltage (volts)     | $V_a(\text{max})$ | 1,000                                    |
| Maximum Anode Dissipation (watts) | $W_a$             | 75                                       |
| Audio Output (watts) (approx.)    | $W_{out}$         | 15                                       |
| Amplification Factor              | $\mu$             | 5.0                                      |
| Impedance (ohms)                  | $r_a$             | 2,100                                    |
| Mutual Conductance (mA/V)         | $g_m$             | 2.4                                      |
| Grid Voltage (approx.)            | $V_g$             | 150 volts negative at 1,000 anode volts. |

### DIMENSIONS

|                             |     |
|-----------------------------|-----|
| Maximum Overall Length (mm) | 202 |
| Maximum Diameter (mm)       | 57  |

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**TRIODE POWER AMPLIFIER**BASE Jumbo

Viewed from free end of pins.

APPLICATION

The rated value of 75 watts dissipation should never be exceeded. Owing to the small bulb and the special heat-resisting glass employed, the bulb becomes hot during normal operation and it should be mounted in an open well ventilated position. It is advisable to mount the valve in a vertical position with the base downwards, but if this is not desirable the filament should be in the vertical plane when the valve is mounted horizontally.

The filament may be supplied from alternating current and the anode and grid return leads should be taken to the centre tap of the filament transformer. If direct current is used for the filament, the return should be to the positive lead. When the valves are operated in parallel or push-pull, a small choke coil or low resistance should be connected in the grid circuit of each valve to prevent oscillation.

NOTE

The valve is supplied in a special wooden carrying crate to protect it from shock and vibration and it should be kept in this crate when not in use in the valve socket. When valves are kept as spares, they should be periodically used in the amplifier to ensure that they have not deteriorated over a long period.

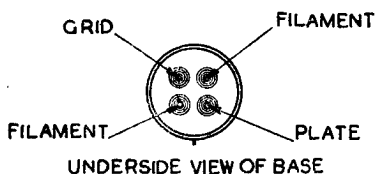
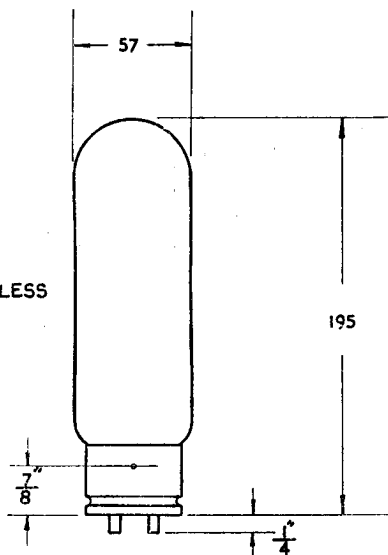
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TRIODE POWER AMPLIFIER

ALL DIMS IN m.m. UNLESS  
STATED OTHERWISE



HARD GLASS BULB

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