MULLARD LIMITED
Century House
Shaftesbury Avenue
London, W.C.2, England

Release No. 1169
Mar. 27, 1953

The EL38 is an output pentode designed for use as a line-time base output tube in television receivers

PHYSICAL SPECIFICATIONS

Cathode	Coated Unipotential
Base	Octal 7 pin
Bulb	Glass
Top Cap	Small
Max.overall length	5 17/32"
Max.seated height	5"
Maximum diameter	1 25/32"
Mounting position	Any

GENERAL ELECTRICAL DATA

Heater Voltage	6.3 volts
Heater Current	1.4 amps

DIRECT ELECTRODE CAPACITANCES
(No external shield)

Plate to grid mas.	1.2 uuF
Input	18 uuF
Output	6.5 uuF

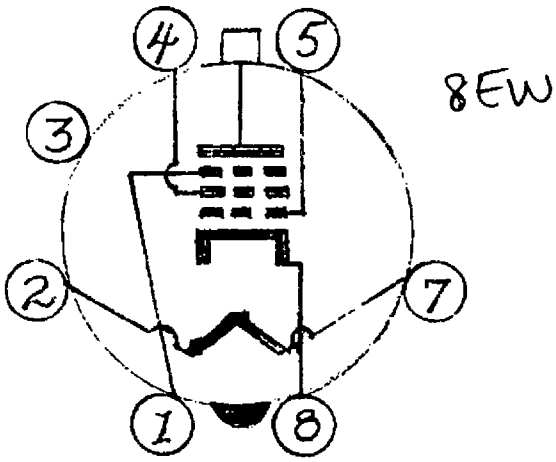
MAXIMUM RATINGS (Design Centre Values)

Peak plate voltage	8,000 volts
Plate supply voltage	1200 volts
Plate voltage	800 volts
Plate dissipation	25 watts
Grid No.2 supply voltage	800 volts
Grid No.2 voltage	400 volts
Grid No.2 dissipation	8 watts
Cathode current	200 mamps
Grid No.1 circuit resistance	500,000 ohms
External resistance between heater and cathode	20,000 ohms
Voltage between heater and cathode	100 volts

OPERATING CHARACTERISTICS

Plate voltage	275 volts
Grid No.2 voltage	275 volts
Plate current	91 mamps
Grid No.2 current	11 mamps
Grid No.1 voltage	-9 volts
Transconductance	14,000 micromhos
Plate resistance	20,000 ohms
Amplification factor of Grid No.2 with respect to Grid No.1	16.5

BASING DIAGRAM



BASING CONNECTIONS

Pin 1	Grid 3
Pin 2	Heater
Pin 3	No connection
Pin 4	Grid 2
Pin 5	Grid 1
Pin 6	No pin
Pin 7	Heater
Pin 8	Cathode
Top cap	Plate

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