

12E1

BEAM TETRODE

Indirectly heated—for parallel operation

GENERAL

The 12E1 is intended for use as a series or shunt control valve in stabilised power packs.

RATING

Heater Voltage (volts)	V_h	6.3
Heater Current (amps)	I_h	1.6
Maximum Anode Voltage (volts)	$V_a(\text{max})$	800
Maximum Screen Voltage (volts)	$V_{gs}(\text{max})$	300
Maximum Control Grid Voltage (volts)	$V_{g1}(\text{max})$	-100
Maximum Voltage between G_1 and G_2 (volts)	$V_{g1-g2}(\text{max})$	400
Mutual Conductance (mA/V)	g_m	14*
Inner μ	$\mu_{g1,gs}$	5.3*
Maximum Anode Dissipation (watts)	$P_a(\text{max})$	35
Maximum Screen Dissipation (watts)	$P_{gs}(\text{max})$	5.0
Maximum Cathode Current (mA)	$I_k(\text{max})$	300
Maximum Potential Heater/Cathode (volts D.C.)	$V_{h-k}(\text{max})$	300†

* Taken at $V_a = V_{gs} = 150V$ $I_h = 200mA$.

† Provided the cathode is positive.

All maximum ratings are Absolute values not Design Centres.

INTER-ELECTRODE CAPACITANCES (pF)

Grid/Earth	C_{in}	23.0
Anode/Earth	C_{out}	8.0
Anode/Grid	$C_{a,g1}$	0.85

"Earth" denotes the remaining earthy potential electrodes and heater joined to cathode.



12E1

BEAM TETRODE

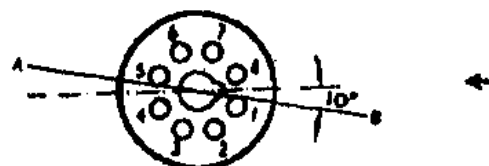
Indirectly heated—for parallel operation

DIMENSIONS

Maximum Overall Length (mm)	146
Maximum Diameter (mm)	54
Maximum Sealed Height (mm)	133
Approximate Net Weight (ozs)	2½
Approximate Packed Weight (ozs)	7

MOUNTING POSITION—Vertical

If run horizontally then the axis AB must be on a horizontal plane.

BULB—ClearTOP CAP—American miniature (CT.1)BASE—International Octal (108)CONNECTIONS

Pin 1	No connection	NC
Pin 2	Heater	h
Pin 3	No connection	NC
Pin 4	Screen Grid	g ₁
Pin 5	Control Grid	g ₂
Pin 6	No connection	NC
Pin 7	Heater	h
Pin 8	Cathode	k
Top Cap	Anode	a

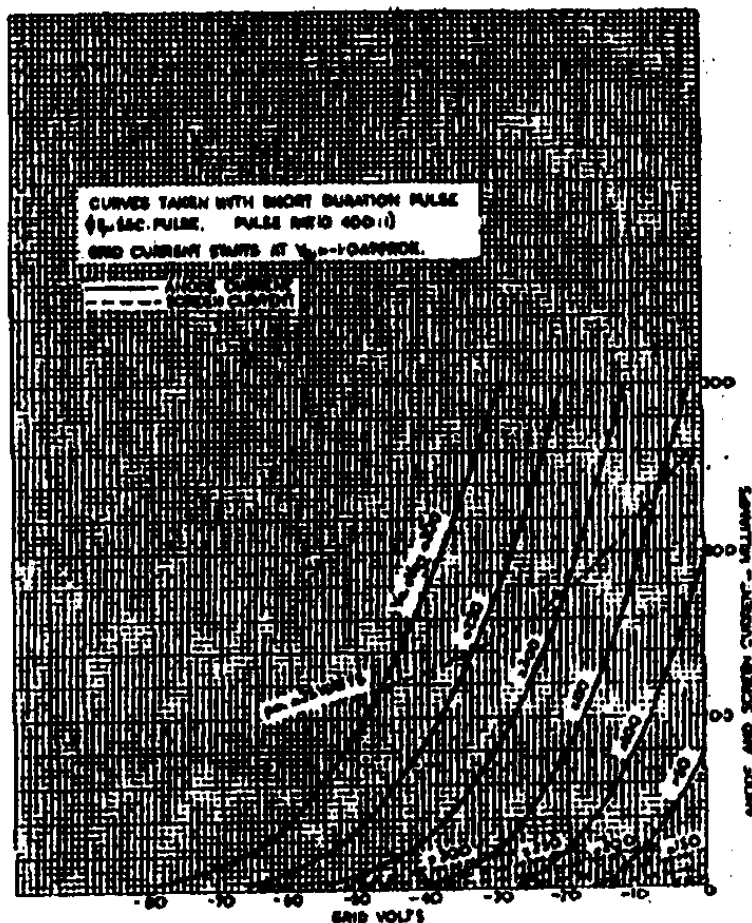
December, 1964

Indicates a change from
Issue 1, Page 1**Associated Electrical Industries Limited**

Electronic Components Division

T. 11, GERRARD STREET

12E1
BEAM TETRODE
 Indirectly heated—for parallel operation



12E1

AEI

EDISWAP

12E1

BEAM TETRODE

Indirectly heated—for parallel operation

