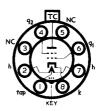




## TYPE **3D21A**BEAM TETRODE



The SV-3D21A has been developed primarily for use as a blocking oscillator and pulse modulator. It is also suitable for use as a deflection amplifier, regulator or series valve in high voltage power supplies. It is directly equivalent to the U.S.A. 3D21A type.

## CATHODE

Indirectly-heated, oxide-coated. Centre tapped heater. The two hea series or in parallel.	ter sectio	ons may	be	connected e	ither in						
Heater voltage				6.3 or 12.6	٧						
Nominal current	•••			1.7 or 0.85	À						
Minimum cathode heating time				30	secs						
<b>2</b> 111212											
CHARACTERISTICS											
$\begin{array}{ll} \text{Mutual Conductance } \left\{ \begin{array}{ll} \text{Measured at V}_a \\ \text{Vg}_2 \text{ 300 V} : \text{Vg}_1 \end{array} \right. \end{array}$	600 V } 30 V }	•••	•••	5.5	mA/V						
DIRECT INTERELECTRODE CAPACITANCES											
Input				19	ρF						
Output				10	pF						
Anode to Grid	•••	•••	• • •	1	pF						
MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS											
Pulse Operation					5115						
Maximum Ratings											
† *Maximum direct anode supply voltag	ge	•••		3.5	kV						
Maximum direct anode dissipation	•••		• • •	15	W						
Maximum peak anode voltage, includ	ing transi	ent .		5	kV						
†Maximum direct screen supply voltag	ge			850	٧						
Maximum direct screen dissipation				3	W						
Maximum negative grid voltage inclu-	ding trans	sient .		<b>—500</b>	٧						
Maximum positive peak grid voltage	•••			220	٧						
Maximum grid dissipation	•••			0.5	W						
Maximum heater cathode voltage	•••			150	٧						
‡Maximum pulse length				10	μsec						
Continued overleaf											

VALVES

## 3D21A

Typical Operating Conditions						
Direct anode voltage	•••	•••	1.5	2.5	3.5	k۷
Direct screen voltage		• • • •	800	800	800	V.
Direct grid voltage			<u>-150</u>	<u>_150</u>	<b>—150</b>	v
Peak pulse grid voltage	• • •	•••	300	300	300	<b>v</b>
Load resistor		• • • •	160	305	450	$\frac{\Omega}{kW}$
Power output, peak, approx.			/	14	21	KYY

\* With a screen voltage not exceeding 400 volts D.C. and when no instantaneous anode voltage due to transient is present (essentially resistive anode load), a maximum anode voltage of 4,500 volts D.C. may be used.

† Series resistance must be inserted in the power supply to limit the D.C. short

circuit current to less than 0.5 ampere.

‡ Total pulse length in any 240 micro-second period must not exceed 12 micro-seconds.

For full technical details, apply to Standard Telephones & Cables Ltd., Special Valve Sales, Connaught House, Aldwych, London, W.C.2.

