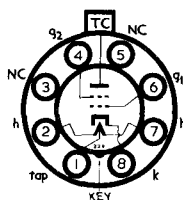


TYPE 3D21A BEAM TETRODE



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 heater sections may be connected either in series or in parallel.

Heater voltage	...	...	...	...	...	6.3 or 12.6	V
Nominal current	...	...	...	...	...	1.7 or 0.85	A
Minimum cathode heating time	...	...	...	...	...	30	secs

CHARACTERISTICS

Mutual Conductance	{ Measured at V_a 600 V V_{g2} 300 V : V_{g1} -30 V }					...	...	5.5	mA/V
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DIRECT INTERELECTRODE CAPACITANCES

Input	...	...	...	...	...	...	...	19	pF
Output	...	...	...	...	...	...	...	10	pF
Anode to Grid	...	...	...	...	...	...	...	1	pF

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Pulse Operation

Maximum Ratings							
† *Maximum direct anode supply voltage	...	...	...	...	3.5	kV	
Maximum direct anode dissipation	...	...	...	...	15	W	
Maximum peak anode voltage, including transient	...	...	...	...	5	kV	
† *Maximum direct screen supply voltage	...	...	...	...	850	V	
Maximum direct screen dissipation	...	...	...	...	3	W	
Maximum negative grid voltage including transient	...	...	...	...	-500	V	
Maximum positive peak grid voltage	...	...	...	...	220	V	
Maximum grid dissipation	...	...	...	...	0.5	W	
Maximum heater cathode voltage	...	...	...	...	150	V	
‡ *Maximum pulse length	...	...	...	...	10	μsec	

Continued overleaf

Typical Operating Conditions

Direct anode voltage	...	...	...	1.5	2.5	3.5	kV
Direct screen voltage	...	...	...	800	800	800	V
Direct grid voltage	...	...	...	-150	-150	-150	V
Peak pulse grid voltage	...	...	...	300	300	300	V
Load resistor	...	...	...	160	305	450	Ω
Power output, peak, approx.	...	...	...	7	14	21	kW

* 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.

