

21N12

# EDISWAN

## 21N12

### MERCURY VAPOUR THYRATRON

Indirectly heated

### TENTATIVE

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#### GENERAL

The 21N12 is a convection cooled Mercury Vapour Thyatron. It has an indirectly heated oxide coated cathode and it is intended for use in power supplies and welding equipment, etc.

#### RATING—Absolute Values

Heater Voltage	$V_h$	$5.0 \pm 5\%$	V
Heater Current (nominal)	$I_h$	5.0	A†
Maximum Peak Forward Anode Voltage		10	kV
Maximum Peak Inverse Anode Voltage	P.I.V.(max)	10	kV
Maximum Anode Voltage Drop		18	V
Maximum Mean Cathode Current (max averaging 15 secs)	$I_{k(av)max}$	3	A
Maximum Peak Cathode Current	$I_{k(pk)max}$	25	A
Maximum Surge Cathode Current (0.1 sec)		250	A
Maximum Grid Resistance	$R_g(max)$	100	$k\Omega$
Maximum Supply Frequency		150	c/s
Condensed Mercury Temperature Limits	THg	35 to 70	$^{\circ}C$

† The heater must be switched on for a minimum of three minutes before the anode voltage is applied.

#### DIMENSIONS

Maximum Overall Length	248	mm
Maximum Diameter	59	mm
Maximum Seated Height	240	mm

December, 1960

Advance Data

**Associated Electrical Industries Limited**

RADIO & ELECTRONIC COMPONENTS DIVISION

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MOUNTING POSITION—Vertical, base down.

CHARACTERISTICS

Critical Grid Current (at $V_a=6kV$ )		<10	$\mu A$
Control Ratio (nominal)		100 : 1	
Ionization Time (approx)	$t_i$	10	$\mu s$
De-ionization Time (approx)	$t_d$	1,000	$\mu s$

TOP CAP—CT3

BASE—B4F

CONNECTIONS

Pin 1	Grid	g
Pin 2	Heater	h
Pin 3	No Connection	NC
Pin 4	Heater, Cathode	h, k
Cap	Anode	a

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