

EDISWAN

21N12

MERCURY VAPOUR THYRATRON

Indirectly heated
TENTATIVE

21N12

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 Ω
Maximum Supply Frequency		150	c/s
Condensed Mercury Temperature Limits	T_{Hg}	35 to 70	°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

2IN12

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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 μs
De-ionization Time (approx)	t_d	1,000 μs

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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