EDISWAN

MAZDA

30PL14

TRIODE OUTPUT BEAM TETRODE

Indirectly heated—for series operation

TENTATIVE

GENERAL

The 30PL14 is a High Power Triode Beam Tetrode, designed principally for the Frame Time Base circuit of television receivers using 110° and 114° cathode ray tubes.

Each section has its own cathode.

The characteristics for the triode section are the same as for the 6/30L2 triode.

RATINGS

		Tetrode	Triode	
Heater Voltage	V_h	16		V
Heater Current	I_h	0·3		A
Maximum Anode Voltage	$V_{a(max)}$	250*	250	V
Maximum Screen Voltage	$V_{g2(max)}$	250	·	V
Maximum Anode Dissipation	$p_{a(max)}$	8	1	W
Maximum Screen Dissipation	$p_{g2(max)}$	2	·	W
Mutual Conductance	g_m	·	3·4†	mA/V
Amplification Factor	μ	·	18†	
Maximum Mean Cathode Current	$I_{k(av)max}$	75	·	mA
Maximum Heater/Cathode Voltage (r.m.s.)	$V_{h\text{-}k(max)}$	150**	150**	V
Maximum Resistance Grid 1/Cathode (Self Bias)		2	·	MΩ
Maximum Resistance Grid 1/Cathode (Fixed Bias)		1	·	MΩ

* Maximum peak anode voltage (pulse positive) 2·0kV.
Maximum peak anode voltage (pulse negative) 500V.
Maximum pulse duration 5% of one cycle with a maximum of 1 msec.

** Measured with respect to the higher potential heater pin.

† $V_a = 200V$, $I_a = 10mA$.

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DIMENSIONS

Maximum Overall Length	78·5 (mm)
Maximum Diameter	22·2 (mm)
Maximum Seated Height	71·5 (mm)

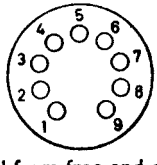
MOUNTING POSITION—Unrestricted.

TYPICAL OPERATION—Frame Time Base

The output stage should be designed to allow for valve spread and deterioration during life in addition to component variation. Values of total peak anode current available for a new average valve and at assumed end of life point for any valve are as follows :—

	V_a	V_{g2}	V_{g1}	I_a
Average New Valve	55V	170V	−1V	210mA
Average New Valve	55V	185V	−1V	235mA
Assumed End of Life Condition	50V	170V	−1V	135mA
Assumed End of Life Condition	50V	185V	−1V	151mA

BASE—Noval (B9A)



Viewed from free end of pins

December, 1960 ADVANCE DATA

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CONNECTIONS

Pin 1	Triode Grid	g_t
Pin 2	Tetrode Cathode, Beam Plates, Screen	k_q, b_p, S
Pin 3	Tetrode Control Grid	g_1
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Tetrode Anode	a_q
Pin 7	Tetrode Screen Grid	g_2
Pin 8	Triode Cathode	k_t
Pin 9	Triode Anode	a_t

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