

Ediswan Mazda Applications Department

Siemens Edison Swan Limited, Cosmos Works, Brimsdown, Enfield, Middlesex.

SUBJECT

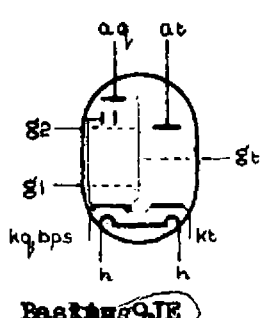
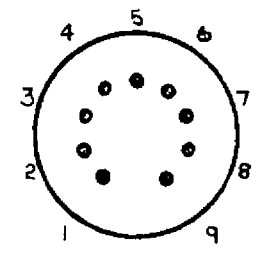
CHIEF ENGINEER'S OFFICE

DATE: 13th January, 1959.

TENTATIVE

(APPLICATIONS)

T.D.S. No. 2-V863B-0-1A

DEVELOPMENTAL		VALVE TYPE 30PL13			
DIMENSIONS		m.m.			
OVERALL LENGTH MAX.		78.5			
DIAMETER MAX.		22.2			
SEATED HEIGHT MAX.		71.5			
TYPE		Triode Output Beam Tetrode			
CATHODE		Indirectly Heated			
USE		AC/DC Mains Television Receivers			
		Frame Time Base			
RATING					
		Tetrode	Note	Triode	NOTE
Heater Current		(Amps)	0.3		
Heater Volts			16		
Maximum Anode Dissipation		(Watts)	7.0		1.0
Maximum Screen Dissipation		(Watts)	2.4		
Maximum Anode Volts			250	A	250
Maximum Screen Volts			250		
Maximum Heater to Cathode Volts		(rms)	150	B	150 B
Mutual Conductance					3.4 C
Amplification Factor					18 C
Maximum Mean Cathode Current		(mA)	75		
Maximum Resistance Grid 1 to Cathode (Self Bias)		(MΩ)	2	D	
CAPACITANCES PF		BASE B9A (NOVAL)		CAP	
ELECTRODES		PIN. ELECTRODE			
TO		1 gt			
TO		2 kq, bp, s			
TO		3 g1			
TO		4 h			
TO		5 h			
TO		6 aq			
TO		7 g2			
TO		8 kt			
TO		9 at			
					
		Base 9JE		VIEW OF FREE END	
MOUNTING POSITION:		Unrestricted		American Base E9-1. Bulb T6 1/2	
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:-					
		Va	Vg2	Vg1	Ia(mA)
Average New Valve.		55	170	-1	175
Assumed End of Life Condition.		50	170	-1	110
Notes					
The V863B and 6/30L2 triode characteristics are identical.					
A. Maximum Peak Anode Voltage(Pulse Positive, 2.0kV. Maximum Peak Anode Voltage(Pulse Negative) 500V. Maximum pulse duration 4% of one cycle with a maximum of 800 μ secs.					
B. Measured with respect to the higher potential heater pin.					
C. Va = 200V. Ia = 10mA.					
D. Maximum Tetrode Resistance Grid 1 to Cathode (Fixed Bias) 1 megohm.					

0.3A

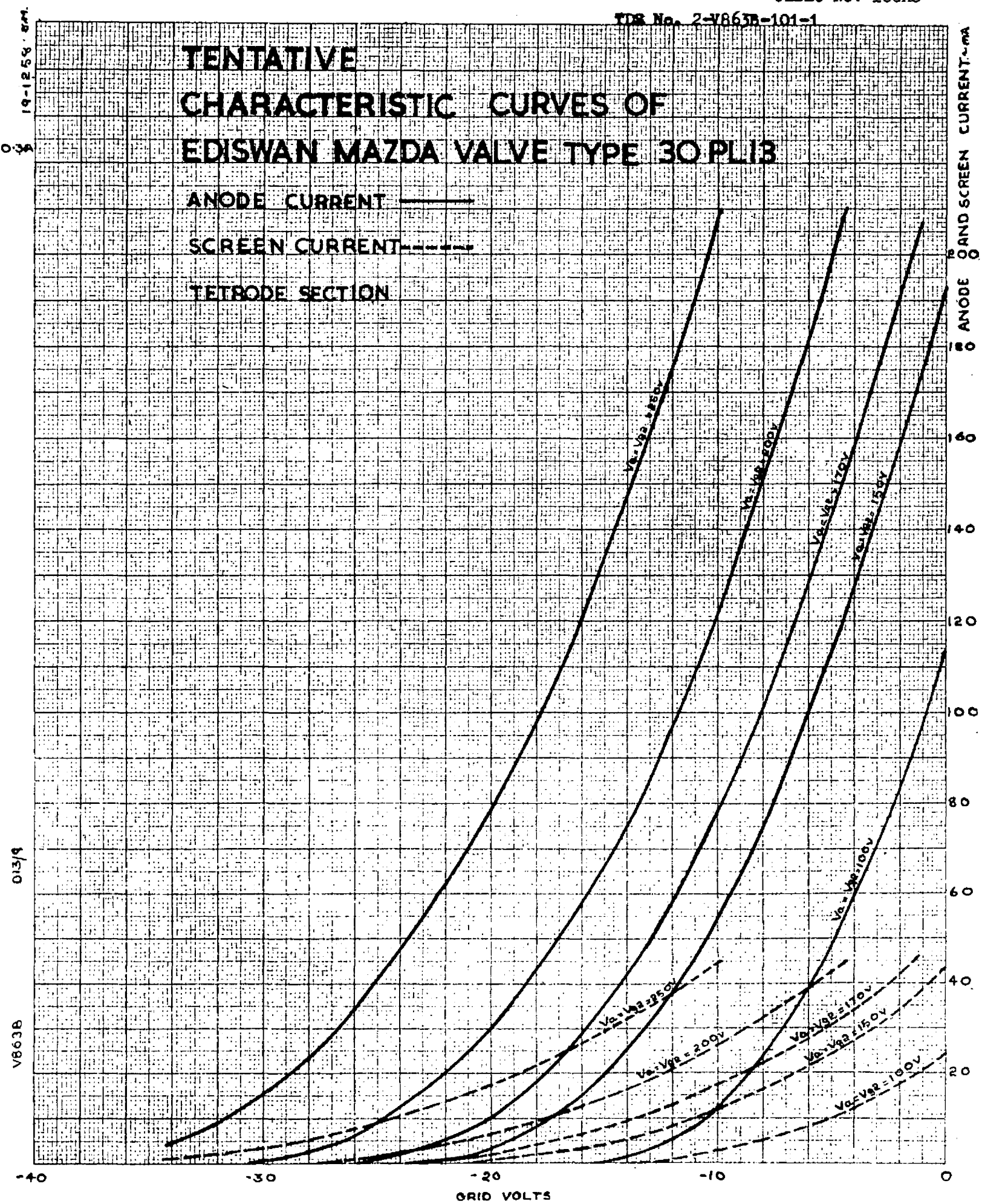
V863B.

TENTATIVE CHARACTERISTIC CURVES OF EDISWAN MAZDA VALVE TYPE 30 PL13

ANODE CURRENT ———

SCREEN CURRENT - - - - -

TETRODE SECTION



**TENTATIVE CHARACTERISTIC CURVES OF
EDISWAN MAZDA VALVE TYPE 30PL13.**

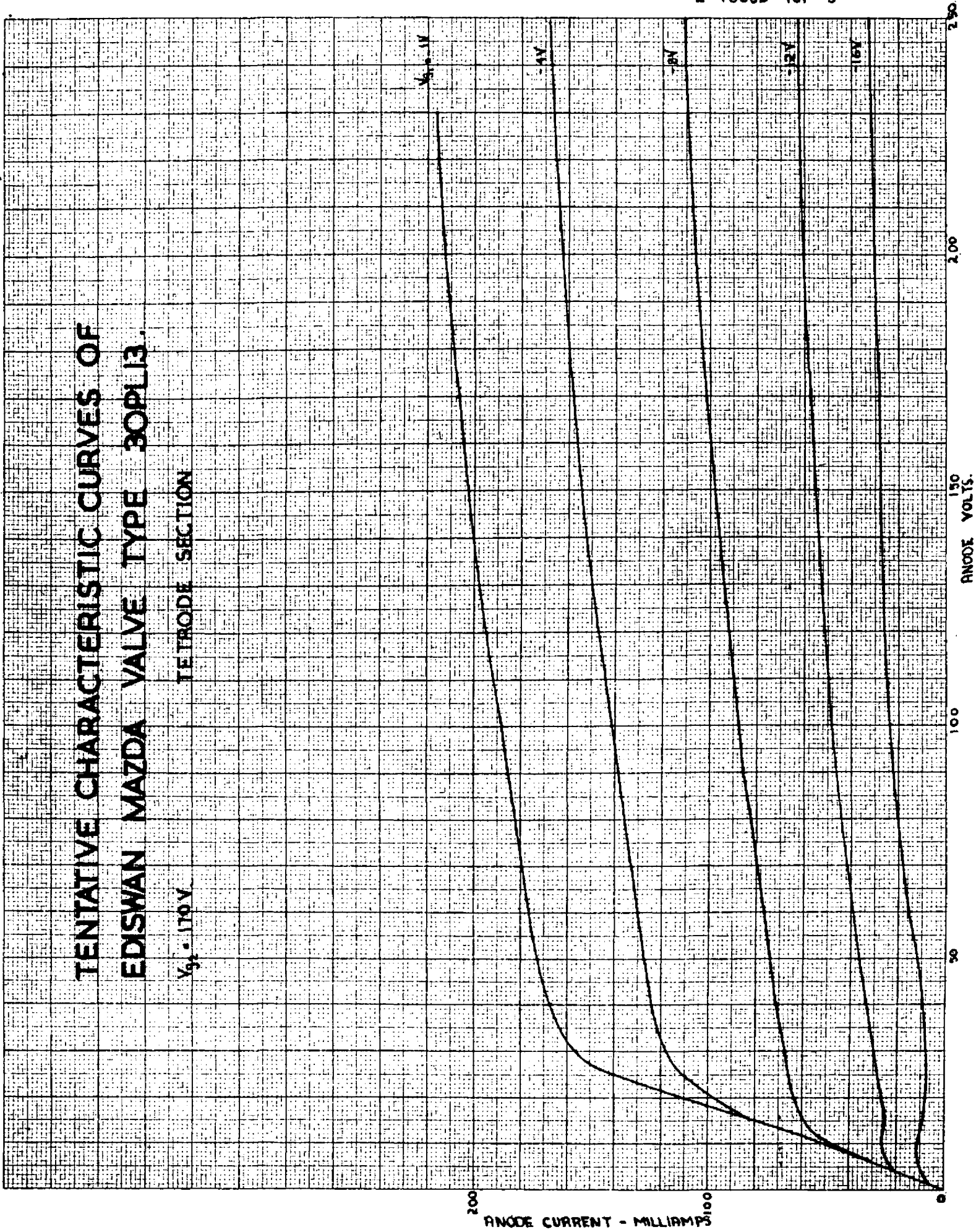
$V_{g1} = 170 \text{ V}$

TETRODE SECTION

D13A

0 19.12.58 H.L.

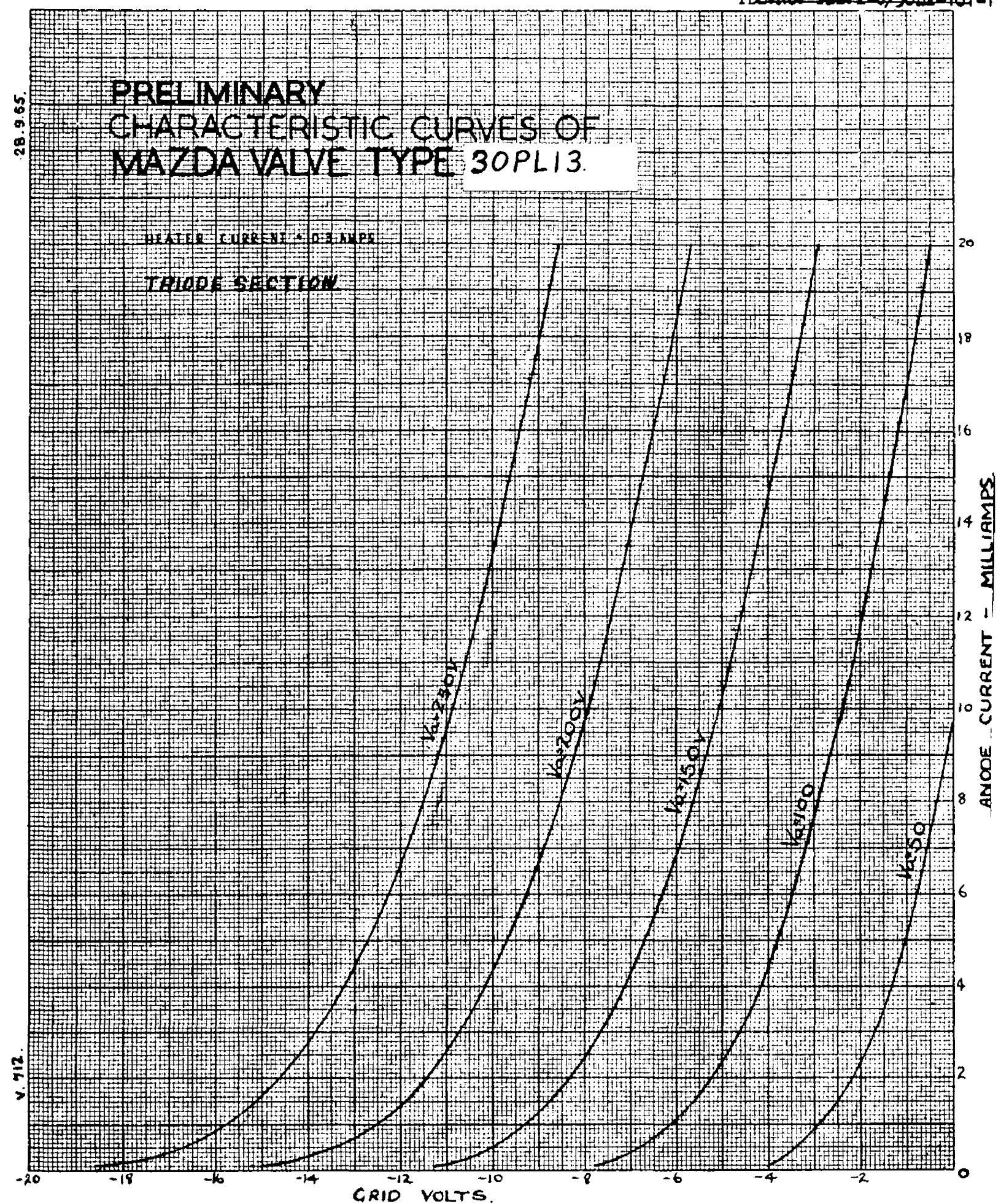
V863B



PRELIMINARY
CHARACTERISTIC CURVES OF
MAZDA VALVE TYPE 30PL13.

HEATER CURRENT = 0.3 AMPS

TRIODE SECTION

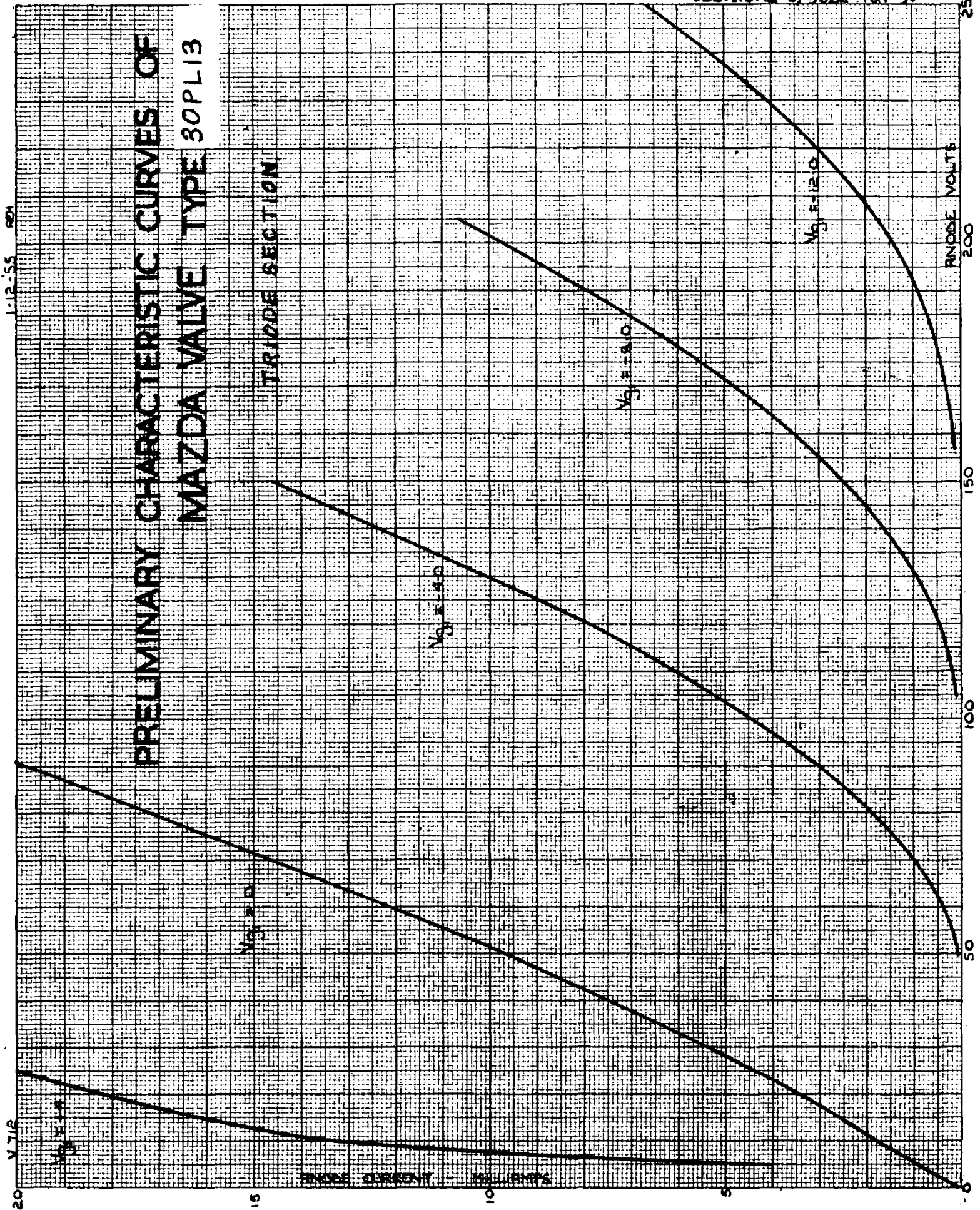


TDS. No. 2-6/30L2-101-3.

PRELIMINARY CHARACTERISTIC CURVES OF
MAZDA VALVE TYPE 30PL13

TRIODE SECTION

1-2-55



TDS. No. 2-6/3012-103-1.

PRELIMINARY
CHARACTERISTIC CURVES OF
MAZDA VALVE TYPE 30PL13

HEATER CURRENT - 0.3 AMPERE

TRIODE SECTION

MUTUAL CONDUCTANCE (mA/V)

2

3

5

GRID VOLTS.

-15

-10

-5

0

V712

-20

20 9 55.

