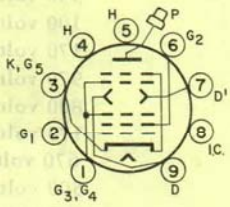
AMPEREX TUBE TYPE 6218/E80T

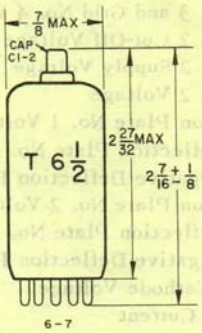
The 6218/E80T is a miniature, 9 pin modulated beam deflection tube having a ribbon shaped beam. It is designed for use as a phase discriminator and pulse generator in pulse controlled oscillator circuits operating at frequencies up to 375 Mc/s.

The 6218/E80T is one of the Amperex "Premium Quality, 10,000 hour" tubes.



PIN CONNECTIONS

1 - GRID NO. 3, GRID NO. 4
2 - GRID NO. 1
3 - CATHODE, GRID NO. 5
4 - HEATER
5 - HEATER
6 - GRID NO. 2
7 - DEFLECTION PLATE
8 - INTERNAL CONNECTION
9 - DEFLECTION PLATE



GENERAL CHARACTERISTICS

MECHANICAL

Cathode	unipotential
Outline	T-6½
Bulb	6-7
Cap	C1-2
Base	E9-1
Base Diagram	9CG
Mounting Position	any
Shock Resistance	500g

ELECTRICAL

Heater Characteristics

Heater Arrangement	parallel supply
Voltage	6.3 volts ± 10%
Current	150 mA

Direct Interelectrode Capacitances	nom.	max.
Grid No. 1 to All Other Electrodes	2.2	3.5 μμf
Deflection Plate No. 1 to All Other Electrodes	3.0	4.5 μμf
Deflection Plate No. 2 to All Other Electrodes	3.0	4.5 μμf
Plate to All Other Electrodes	-	2.0 μμf
Deflection Plate No. 1 to Grid No. 2	-	0.1 μμf
Deflection Plate No. 2 to Grid No. 2	-	0.1 μμf
Grid No. 1 to Grid No. 2	-	0.9 μμf
Deflection Plate No. 1 to Plate	-	0.02 μμf
Deflection Plate No. 2 to Plate	-	0.02 μμf

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Maximum Ratings, Absolute Values

Plate Cut-Off Voltage	600 volts
Plate Voltage	330 volts
Grid No. 3 and Grid No. 4 Cut-Off Voltage	600 volts
Grid No. 3 and Grid No. 4 Voltage	330 volts
Grid No. 2 Cut-Off Voltage	600 volts
Grid No. 2 Supply Voltage	330 volts
Grid No. 2 Voltage	100 volts
Deflection Plate No. 1 Voltage	170 volts
Peak Deflection Plate No. 1 Voltage	970 volts
Peak Negative Deflection Plate No. 1 Voltage	800 volts
Deflection Plate No. 2 Voltage	170 volts
Peak Deflection Plate No. 2 Voltage	670 volts
Peak Negative Deflection Plate No. 2 Voltage	500 volts
Heater-Cathode Voltage	50 volts
Cathode Current	5.5 mA

Typical Characteristics

Plate Voltage	100 volts
Grid No. 3 and Grid No. 4 Voltage	250 volts
Grid No. 2 Voltage	70 volts
Grid No. 1 Voltage	0 volts
Deflection Plate No. 1 Voltage	120 volts
Deflection Plate No. 2 Voltage [1]	120 volts
Plate Current	1.35 ± 0.45 mA
Cathode Current	2.0 mA
Plate Current ($\Delta E_{D_2} = 7.5V$)	0.25 mA
Grid No. 1 Voltage ($I_b \leq 50\ \mu A$)	−20 volts

[1] Adjusted for maximum plate current

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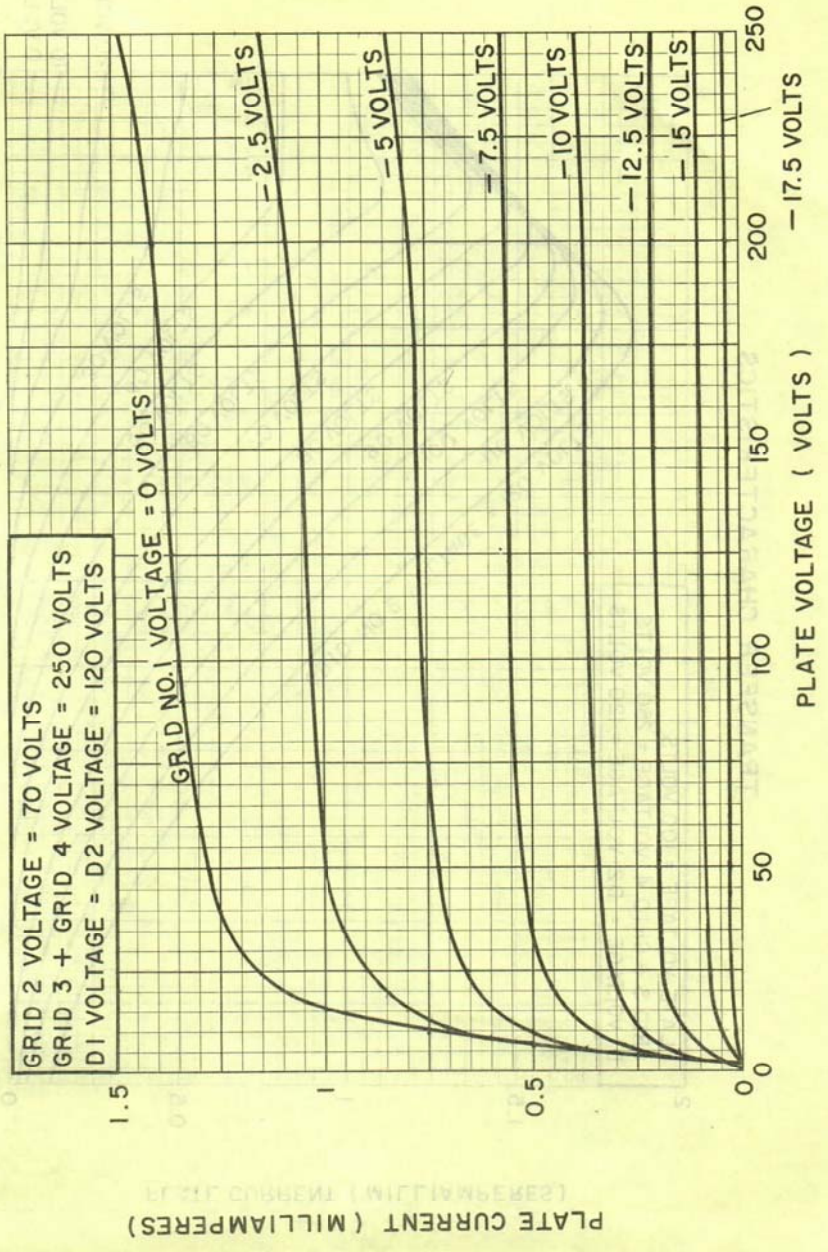
PLATE CHARACTERISTICS



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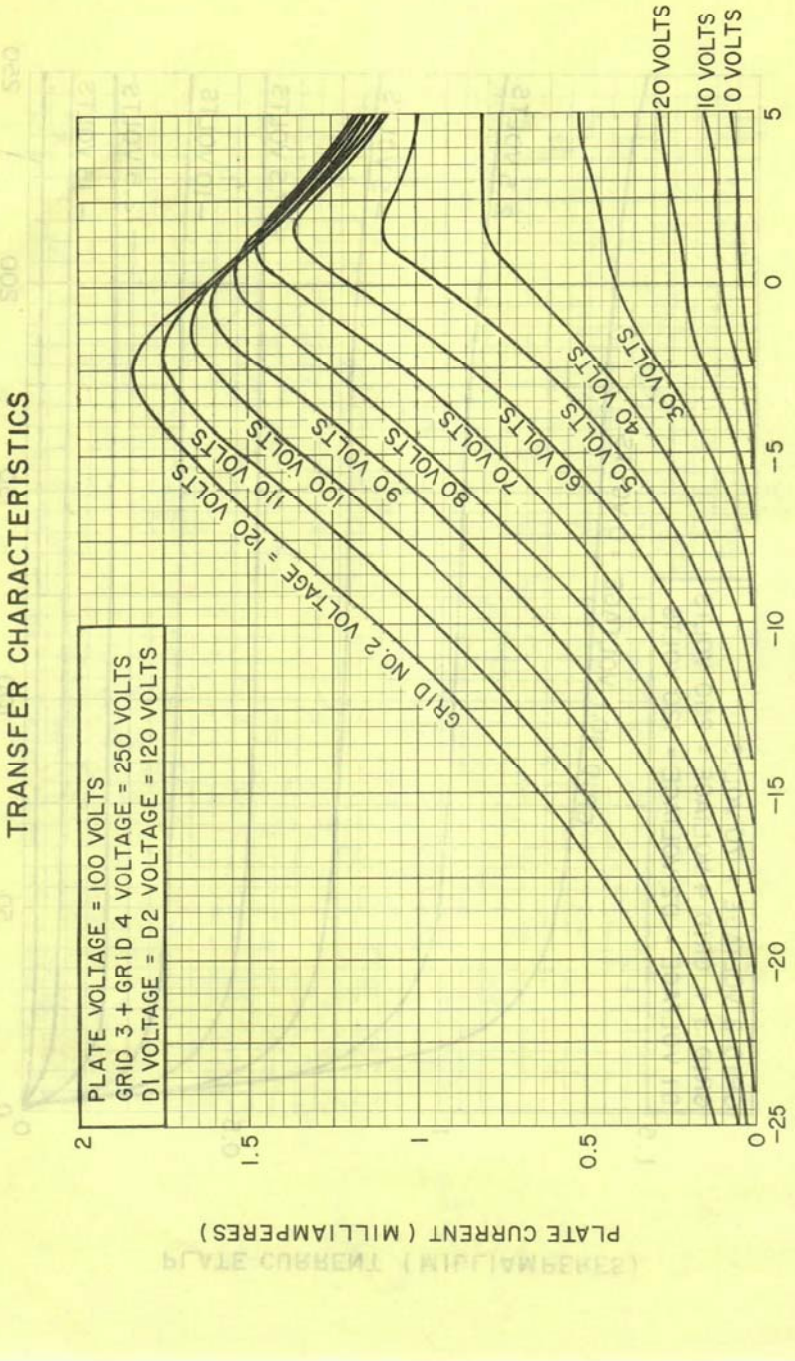
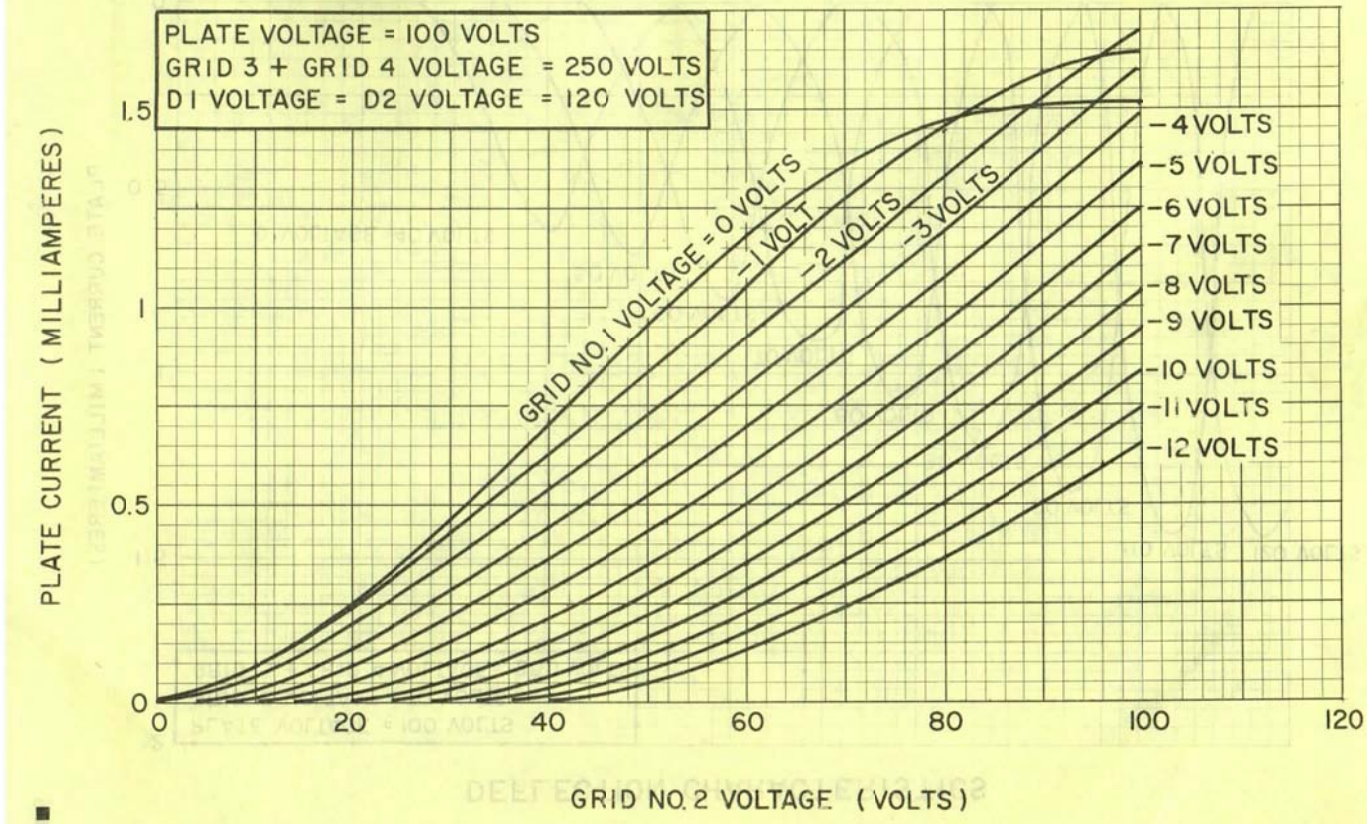

TRANSFER CHARACTERISTICS
PLATE VOLTAGE = 100 VOLTS
GRID 3 + GRID 4 VOLTAGE = 250 VOLTS
D1 VOLTAGE = D2 VOLTAGE = 120 VOLTS
GRID No.2 VOLTAGE = 120 VOLTS
110 VOLTS
100 VOLTS
90 VOLTS
80 VOLTS
70 VOLTS
60 VOLTS
50 VOLTS
40 VOLTS
30 VOLTS
20 VOLTS
10 VOLTS
0 VOLTS
PLATE CURRENT (MILLIAMPERES)
GRID NO.1 VOLTAGE (VOLTS)
2
1.5
1
0.5
0
5
0
-5
-10
-15
-20
-25

GRID NO. 2 TRANSFER CHARACTERISTICS



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DEFLECTION CHARACTERISTICS