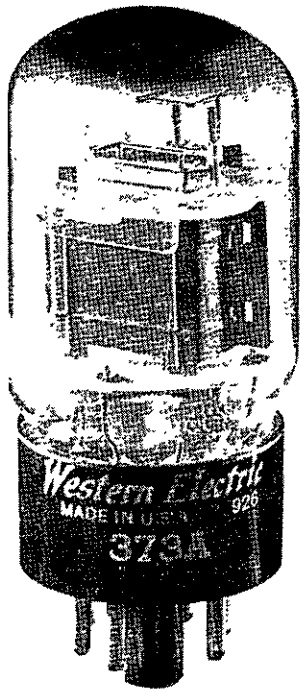


PENTODE

Western Electric

DESCRIPTION

The 373A is a filamentary type suppressor grid pentode. It is designed for use as an audio, carrier or radio-frequency voltage amplifier, oscillator or modulator.

CHARACTERISTICS

Filament Voltage, A-C		2.0 volts
Plate Current	$E_b = E_{c2} = 150$ volts;	2 milliamperes
Transconductance	$E_{c1} = -3$ volts; $E_{c3} = 0$	1280 micromhos

GENERAL CHARACTERISTICS

ELECTRICAL DATA

Filament Voltage, A-C	2.0 volts
Filament Current	250 milliamperes
Direct Interelectrode Capacitances	
Grid to Plate (maximum)	0.07 uuf
Input	5.9 uuf
Output	5.0 uuf

MECHANICAL DATA

Cathode	Coated Filament
Bulb	T11
Base[1]	Short intermediate shell, 7-pin octal
Mounting Position	Vertical — or horizontal with plane of filament vertical.

Dimensions and pin connections shown in outline drawing on Page 4

MAXIMUM RATINGS, Design-Center Values

Plate Voltage	250 volts
Screen Grid Voltage	150 volts
Plate Dissipation	2 watts
Screen Grid Dissipation	0.45 watt

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

Filament Voltage, A-C	2.0	2.0	volts
Plate Voltage	150	250	volts
Screen Grid Voltage	150	150	volts
Control Grid Voltage	−3	−3	volts
Suppressor Grid Voltage	0	0	volts
Plate Current	2.0	2.1	milliamperes
Screen Grid Current	0.47	0.45	milliampere
Peak A-F Signal Voltage	2	2	volts
Plate Resistance	1.5	2.0	megohms
Transconductance	1280	1310	micromhos
Load Resistance	100000	250000	ohms
Power Output	120	160	milliwatts
Total Harmonic Distortion	8.5	7.8	per cent
Control Grid Voltage, Approximate, for 10 Microamperes Plate Current	−7.0	−7.4	volts

1. Pin #6 is connected internally to pin #5 and is approximately 3/32 inch shorter than the other pins to minimize noise when changing tubes while in service.

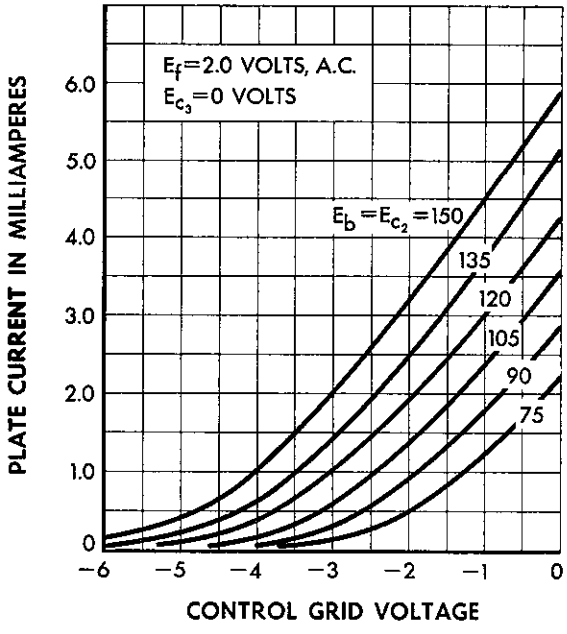
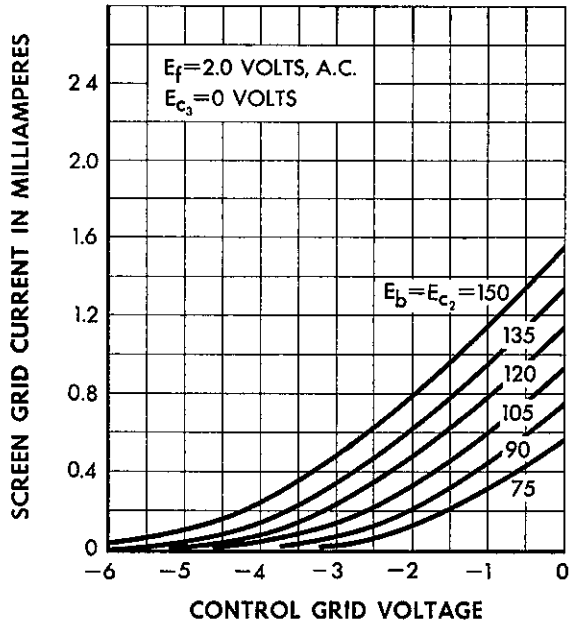
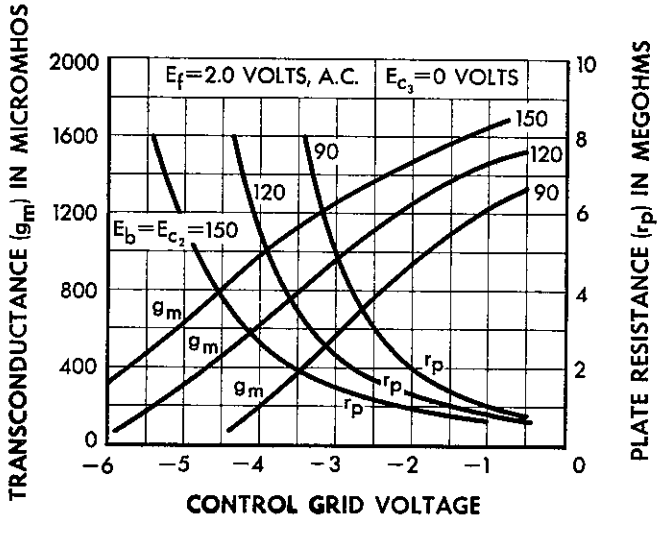
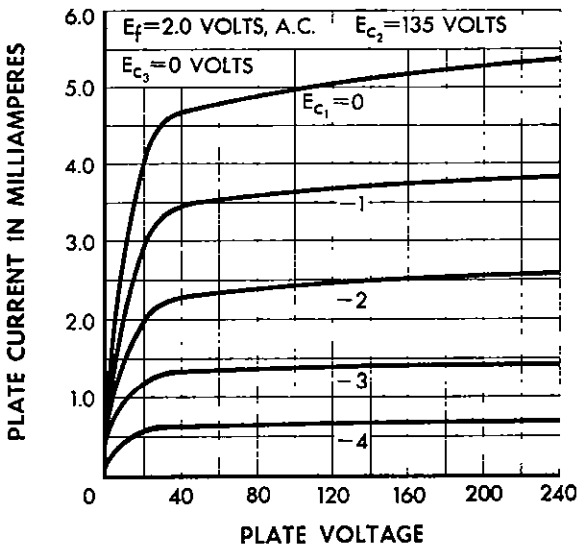
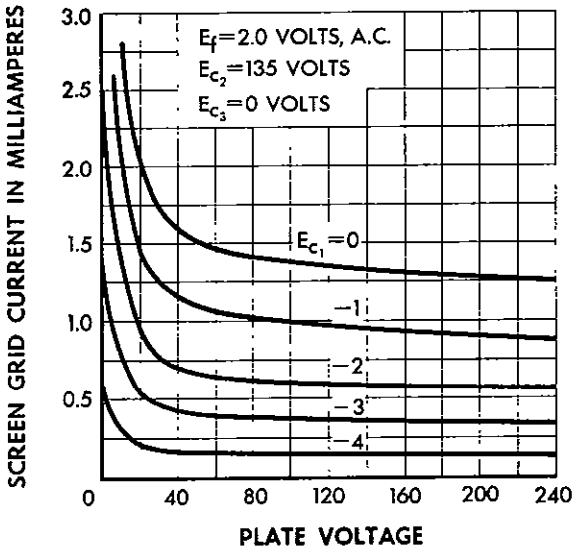


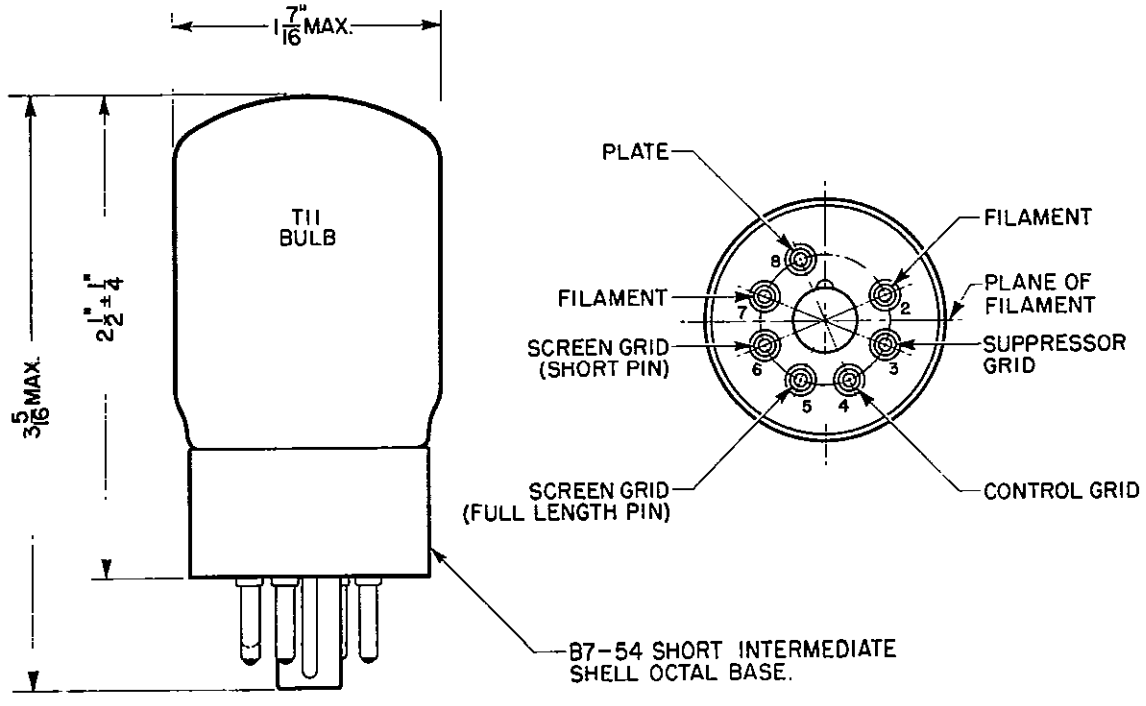
PLATE CURRENT IN MILLIAMPERES
E_f=2.0 VOLTS, A.C.
E_{c_3}=0 VOLTS
E_b=E_{c_2}=150
135
120
105
90
75
6.0
5.0
4.0
3.0
2.0
1.0
0
−6 −5 −4 −3 −2 −1 0
CONTROL GRID VOLTAGE


SCREEN GRID CURRENT IN MILLIAMPERES
E_f=2.0 VOLTS, A.C.
E_{c_3}=0 VOLTS
E_b=E_{c_2}=150
135
120
105
90
75
2.4
2.0
1.6
1.2
0.8
0.4
0
−6 −5 −4 −3 −2 −1 0
CONTROL GRID VOLTAGE


TRANSCONDUCTANCE (g_m) IN MICROMHOS
PLATE RESISTANCE (r_p) IN MEGOHMS
E_f=2.0 VOLTS, A.C.
E_{c_3}=0 VOLTS
E_b=E_{c_2}=150
120
90
150
120
90
g_m
g_m
g_m
r_p
r_p
r_p
2000
1600
1200
800
400
0
10
8
6
4
2
0
−6 −5 −4 −3 −2 −1 0
CONTROL GRID VOLTAGE







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A development of Bell Telephone Laboratories, the research laboratories of the American Telephone and Telegraph Company and the Western Electric Company.