

12BD6

Description and Rating

RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION

Principal Application: The 12BD6 is a miniature remote-cutoff amplifier pentode designed for use as a radio-frequency or intermediate-frequency ampli-

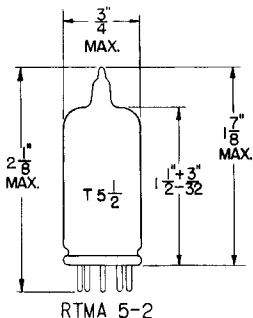
Cathode Coated Unipotential
 Heater Voltage (A-C or D-C) 12.6 Volts
 Heater Current 0.15 Ampere
 Envelope T-5½ Glass
 Base E7-1, Miniature Button 7-Pin
 Mounting Position Any

fier. Electrically, the 12BD6 is similar to the 12SK7 and, except for heater ratings, is identical to the 6BD6.

Direct Interelectrode Capacitances:

	With Shield #	without Shield
Grid 1 to Plate (Max)	0.005	0.004 $\mu\mu\text{f}$
Input	4.3	4.3 $\mu\mu\text{f}$
Output	5.0	5.0 $\mu\mu\text{f}$

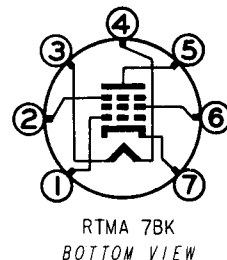
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Grid Number 1
- Pin 2 - Grid Number 3 (Suppressor) and Internal Shield
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Plate
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Cathode

BASING DIAGRAM



DESIGN CENTER VALUES

Plate Voltage	300	Volts
Screen Voltage	125	Volts
Plate Dissipation	3.0	Watts
Screen Dissipation	0.65	Watt
Heater-Cathode Voltage	90	Volts

MAXIMUM RATINGS

CLASS A₁ AMPLIFIER

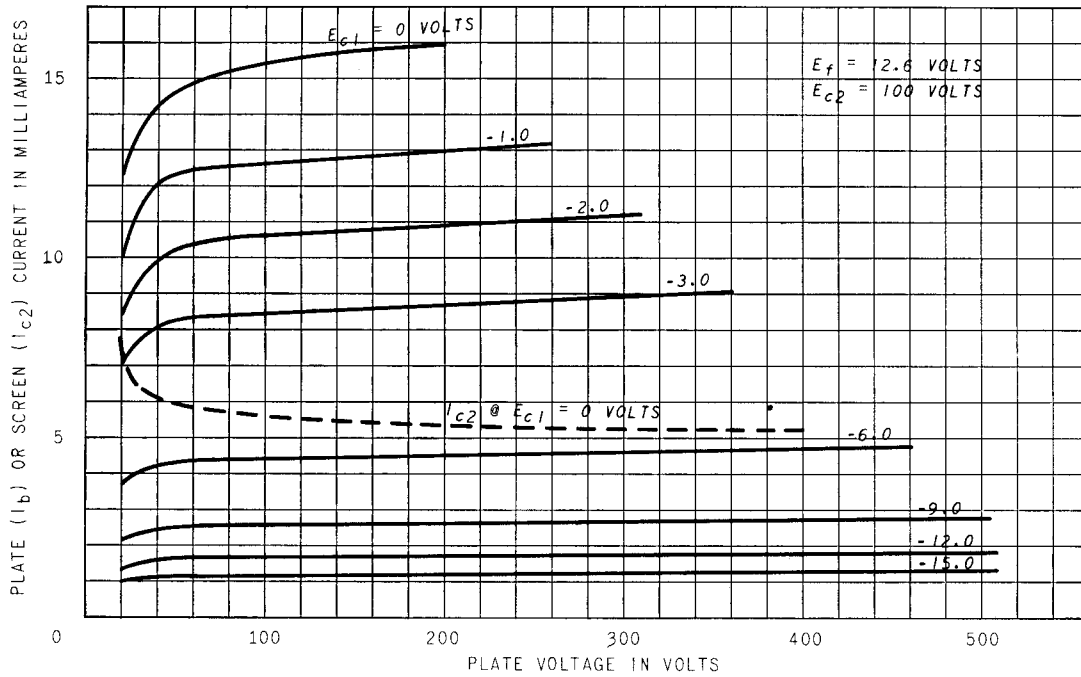
Plate Voltage	100	125	250	Volts
Suppressor Voltage	0*	0*	0*	Volts
Screen Voltage	100	125	100	Volts
Grid Number 1 Voltage	-1	-3	-3	Volts
Plate Resistance	0.15	0.18	0.8	Megohm
Transconductance	2250	2350	2000	Micromhos
Plate Current	13	13	9	Milliamperes
Screen Current	5	5	3	Milliamperes
Grid Number 1 Voltage (Approx) for G _m = 10 Micromhos	-35	-45	-35	Volts

CHARACTERISTICS AND TYPICAL OPERATION

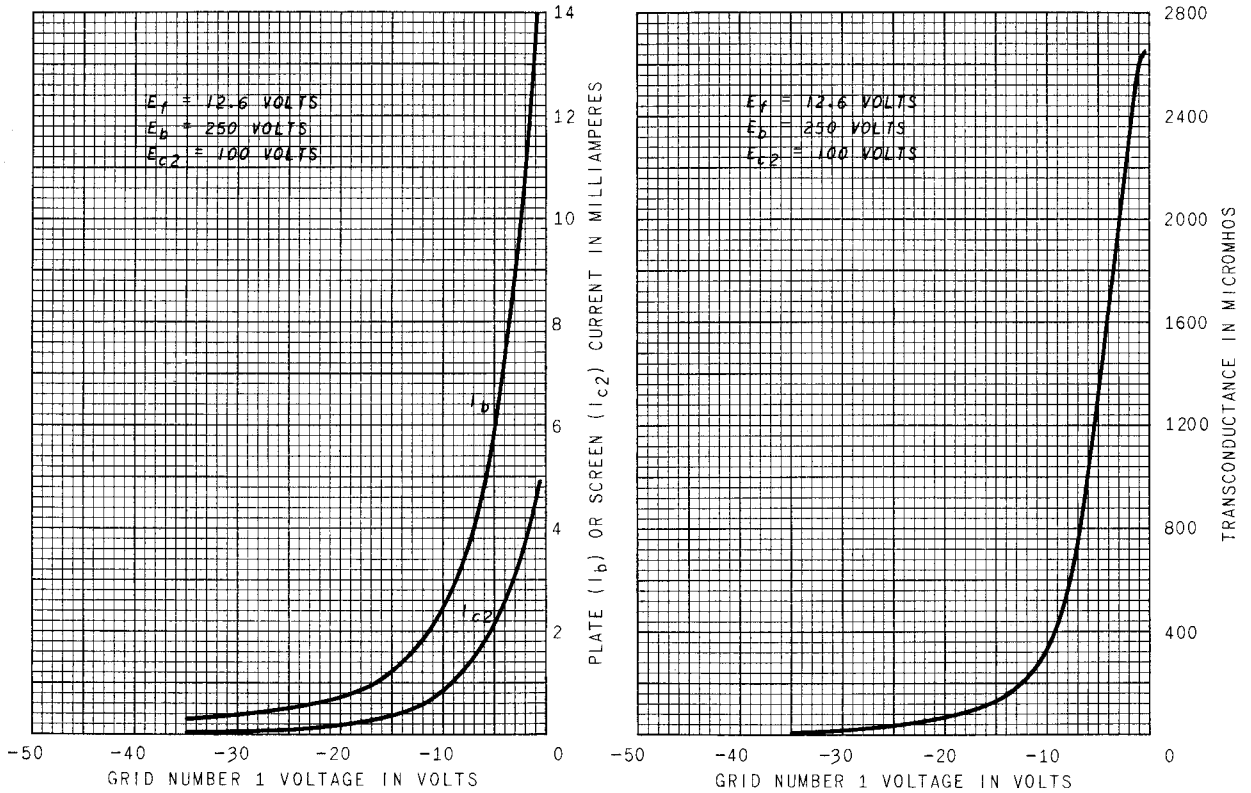
With external shield #316 connected to pin 7

* Pin 2 connected to pin 7 at socket

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Department, Electronics Division



Schenectady, N. Y.