



# 1T4

## Description and Rating

### PENTODE

The 1T4 is a miniature remote-cutoff pentode designed for use as a radio-frequency or intermediate-frequency amplifier in compact, battery-operated equipment. Its remote-cutoff characteristic makes it particularly suitable for use in stages to which automatic-volume-control is applied.

#### GENERAL

Cathode - Coated Filament  
 Filament Voltage, D-C . . . . . 1.4 Volts  
 Filament Current . . . . . 0.05 Ampere  
 Envelope - T-5½, Glass  
 Base - E7-1, Miniature Button 7-Pin  
 Mounting Position - Any

Direct Interelectrode Capacitances	With Shield *	Without Shield	
Grid-Number 1 to Plate, maximum . . . . .	0.01	0.01	μμf
Input . . . . .	3.6	3.6	μμf
Output . . . . .	7.5	7.5	μμf

#### MAXIMUM RATINGS

##### DESIGN-CENTER VALUES

Plate Voltage . . . . .	90	Volts
Screen Voltage . . . . .	90	Volts
Positive D-C Grid-Number 1 Voltage . . . . .	0	Volts
D-C Cathode Current . . . . .	5.5	Milliamperes

#### CHARACTERISTICS AND TYPICAL OPERATION

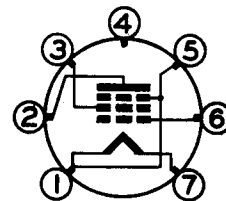
##### CLASS A<sub>1</sub> AMPLIFIER

Plate Voltage . . . . .	45	67.5	90	90	Volts
Screen Voltage . . . . .	45	67.5	45	67.5	Volts
Grid-Number 1 Voltage . . . . .	0	0	0	0	Volts
Plate Resistance, approximate . . . . .	0.35	0.25	0.8	0.5	Megohm
Transconductance . . . . .	700	875	750	900	Micromhos
Plate Current . . . . .	1.7	3.4	1.8	3.5	Milliamperes
Screen Current . . . . .	0.7	1.5	0.65	1.4	Milliamperes
Grid-Number 1 Voltage, approximate, G <sub>m</sub> = 10 Micromhos . . . . .	-10	-16	-10	-16	Volts

\* With external shield (RTMA 316) connected to pin 1.

Note: All voltages are referred to the negative terminal of the filament.

#### BASING DIAGRAM

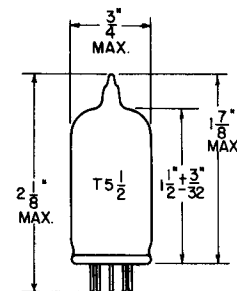


RTMA 6AR  
BOTTOM VIEW

#### TERMINAL CONNECTIONS

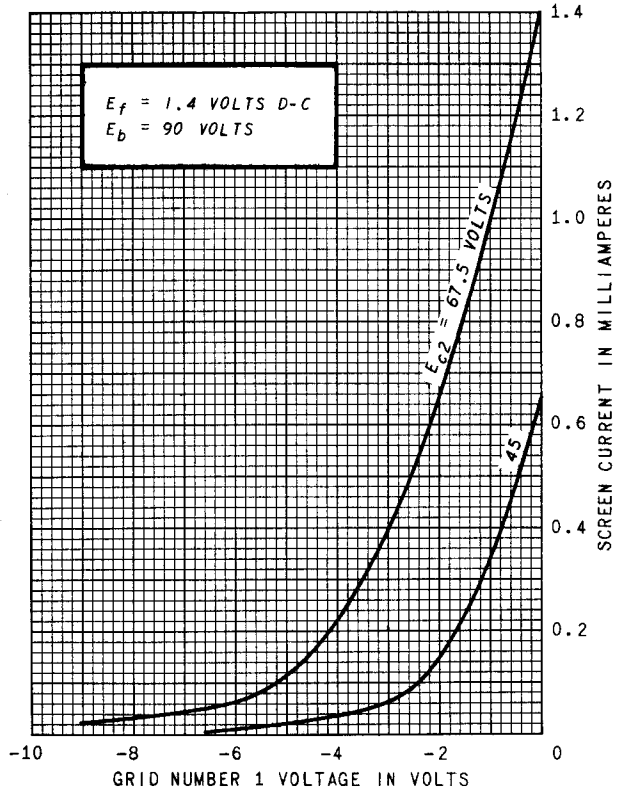
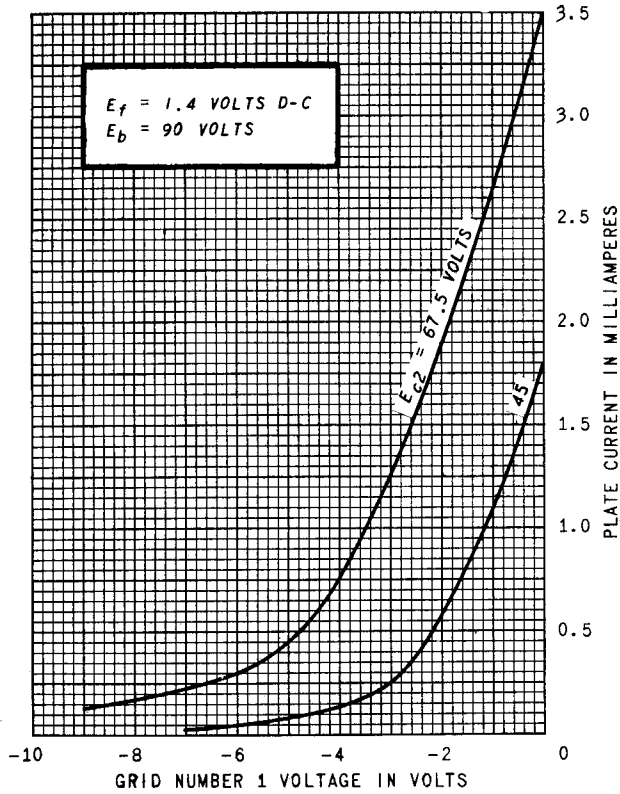
- Pin 1 - Negative Filament, Internal Shield, and Grid Number 3
- Pin 2 - Plate
- Pin 3 - Grid Number 2 (Screen)
- Pin 4 - No Connection
- Pin 5 - Negative Filament, Internal Shield, and Grid Number 3
- Pin 6 - Grid Number 1
- Pin 7 - Positive Filament

#### PHYSICAL DIMENSIONS

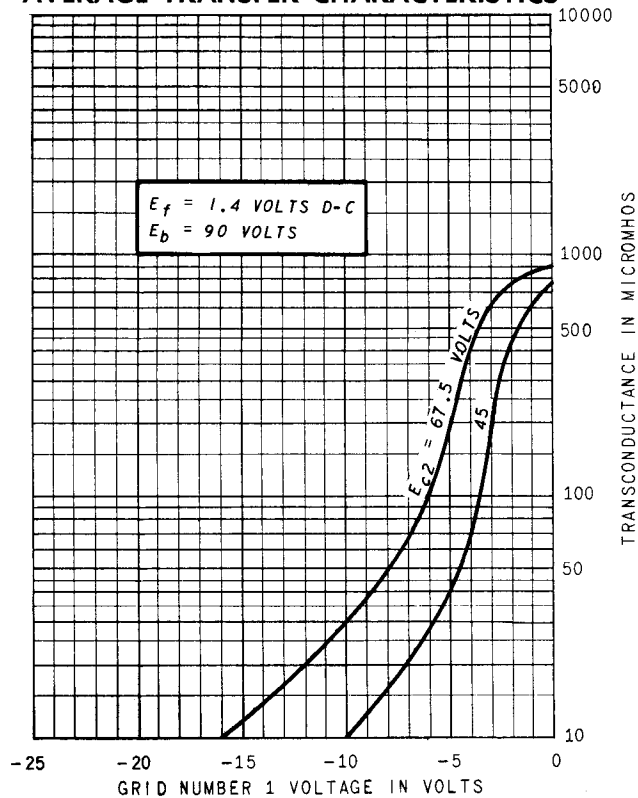


RTMA 5-2

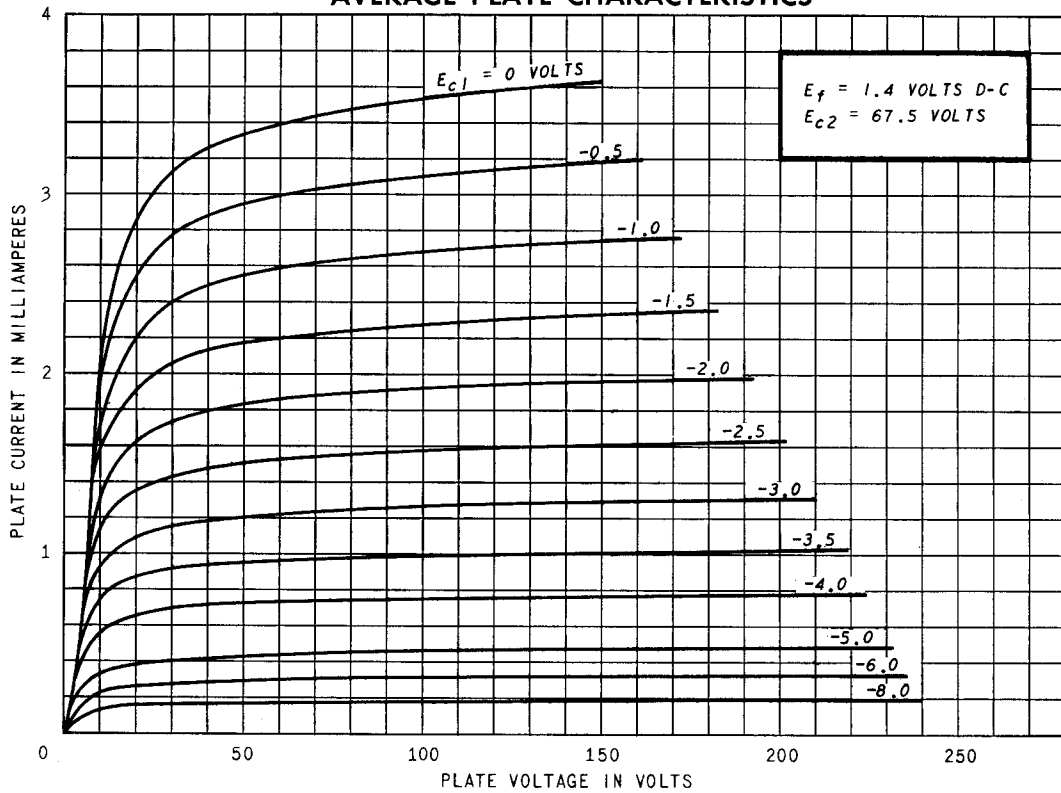
AVERAGE TRANSFER CHARACTERISTICS



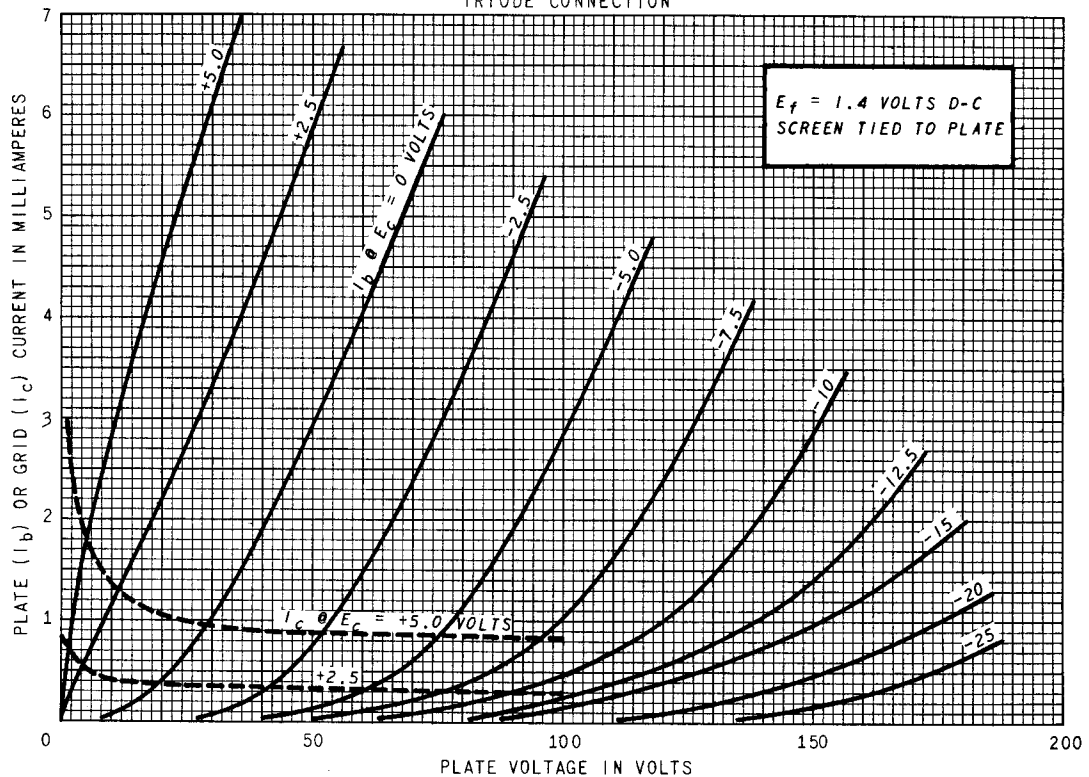
AVERAGE TRANSFER CHARACTERISTICS



### AVERAGE PLATE CHARACTERISTICS



### AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION



TUBE DEPARTMENT  
**GENERAL**  **ELECTRIC**  
Schenectady 5, N. Y.