

November 3, 1958

VHF TETRODE TYPE 7167

The 7167 is a 7-pin miniature sharp-cutoff tetrode designed particularly for service in mobile communication equipment. This type features high transconductance, high input impedance and low interelectrode capacitances. The electrical characteristics are similar to those of type 6CY5.

GENERAL DATA

ELECTRICAL:

Cathode	Coated Unipotential
Heater:	
Voltage, ac or dc	13.5 Volts
Current	0.090 Amperes
Direct Interelectrode Capacitances (Shielded):	
Grid 1 to Plate	.03 max. uuf
Input	4.4 uuf
Output	2.74 uuf

MECHANICAL:

Bulb	T-5-1/2
Base	Miniature 7-Pin (JEDEC E7-1)
Outline	5-2
Basing	7EW
Mounting Position	Any

AMPLIFIER - CLASS A₁

MAXIMUM RATINGS:

Design Maximum Values

Heater Voltage Range:

Maximum	15.5 max.	Volts
Minimum	11.8 min.	Volts
Plate Voltage	180 max.	Volts
Grid 2 (Screen) Supply Voltage	180 max.	Volts
Grid 2 Voltage	See Grid 2 Input Rating Chart	
Plate Dissipation	2.0 max.	Watts
Grid 2 Dissipation	.5 max.	Watts

Grid 1 Control Grid Voltage:

Positive Value	0 max.	Volts
Cathode Current	20 max.	Ma.

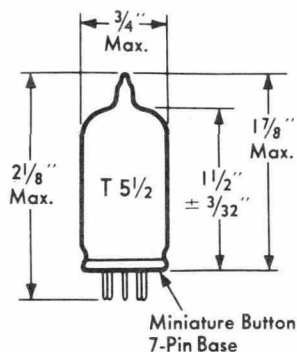
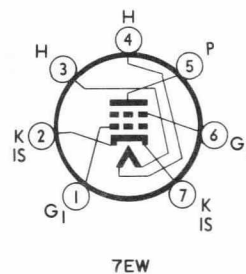
Heater-Cathode Voltage:

Heater Negative with Respect to Cathode:		
Total DC and Peak	100 max.	Volts
Heater Positive with Respect to Cathode:		
DC Component	60 max.	Volts
Total DC and Peak	100 max.	Volts
Grid 1 Circuit Resistance	.5 max.	Megohm

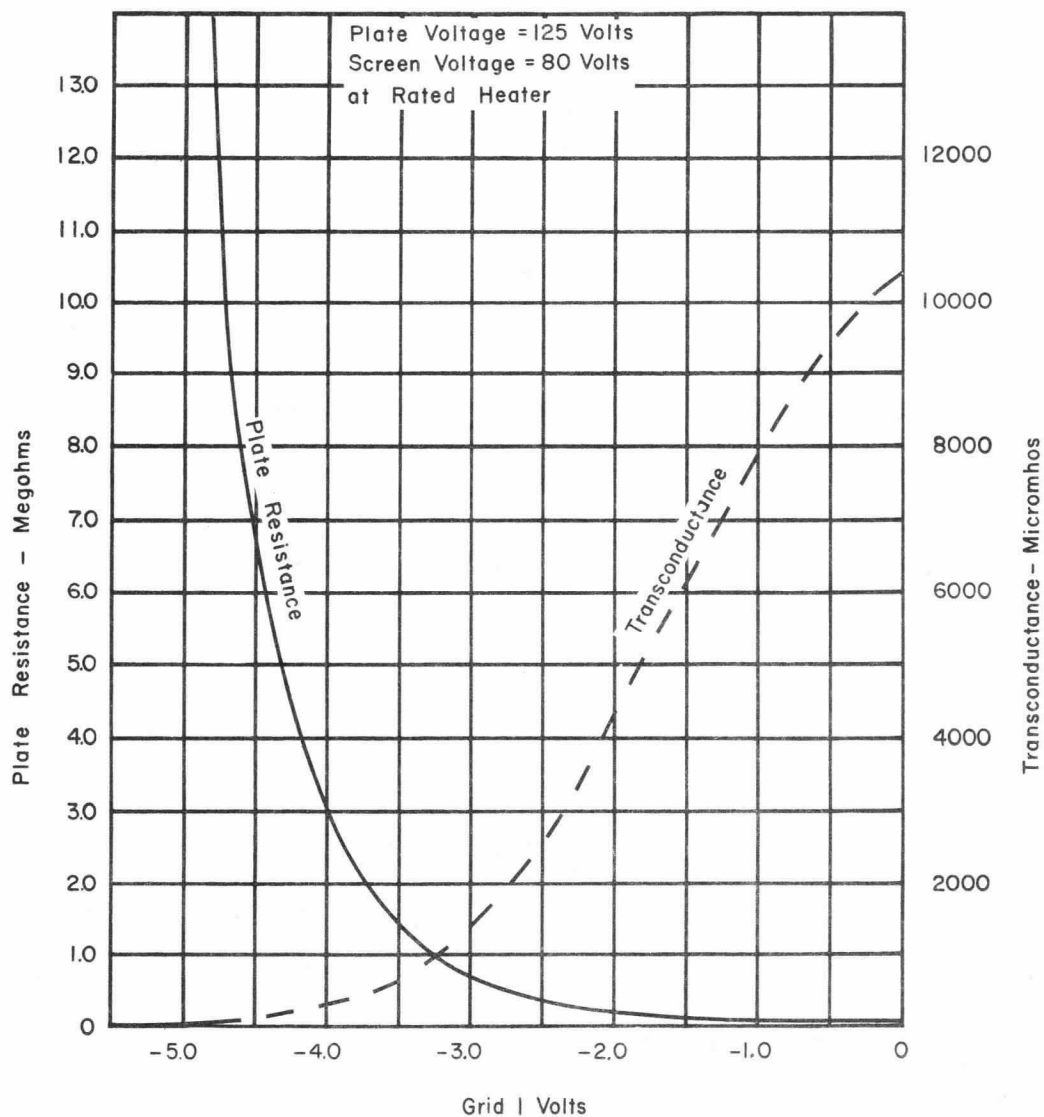
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS:

Plate Voltage	125	Volts
Grid 2 Voltage	80	Volts
Grid 1 Voltage	-1	Volts
Plate Resistance	.125	Megohm
Transconductance	8000	umhos
Grid 1 Cutoff Bias*	-5	Volts
Plate Current	10	Ma.
Grid 2 Current	1.4	Ma.

* For transconductance of 100 umhos

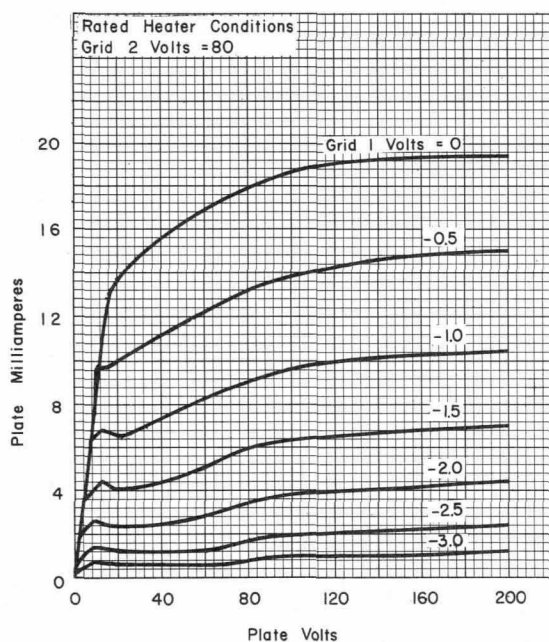


AVERAGE CHARACTERISTICS



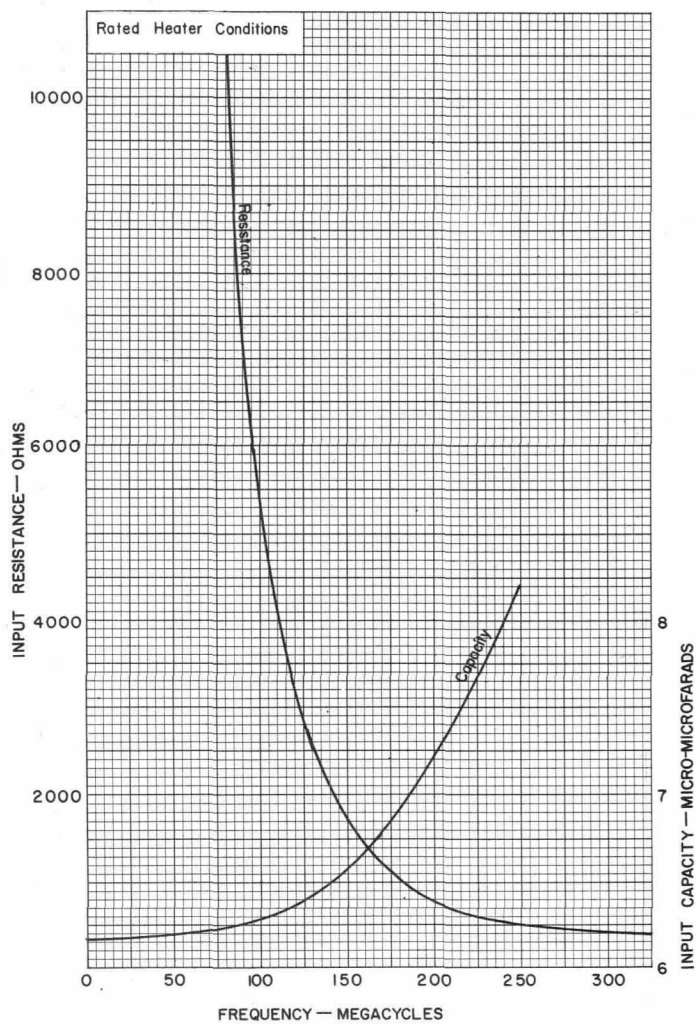
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AVERAGE PLATE CHARACTERISTICS



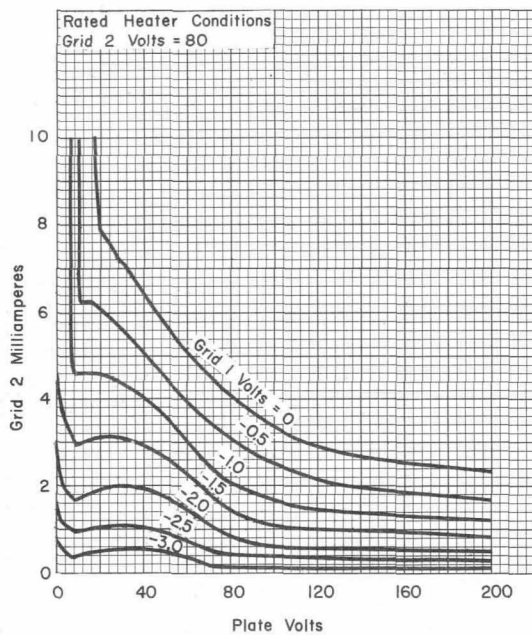
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HOT INPUT IMPEDANCE CHARACTERISTICS



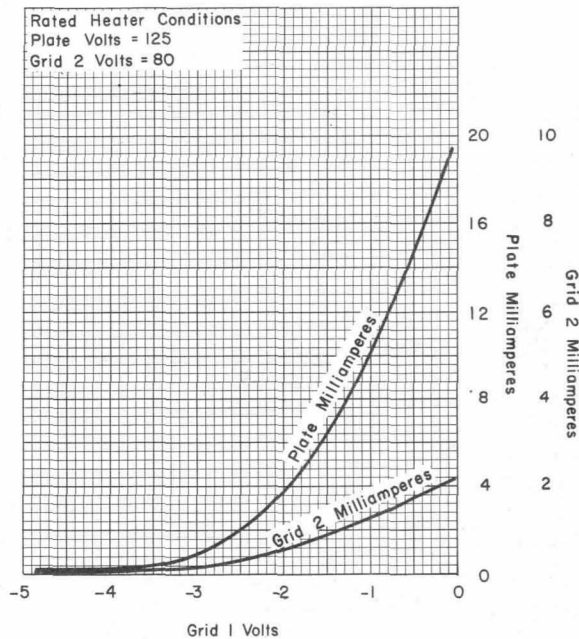
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AVERAGE GRID 2 CHARACTERISTICS

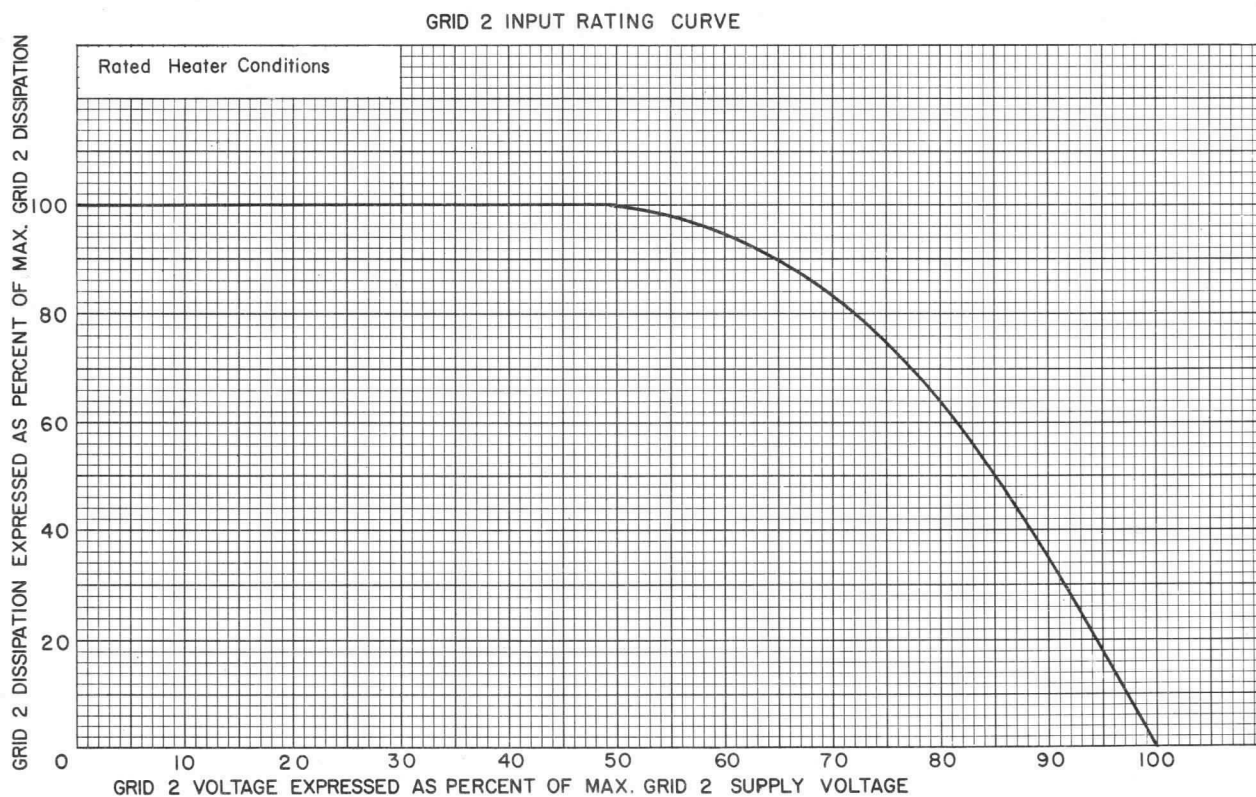


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AVERAGE TRANSFER CHARACTERISTICS



CE-A1256R2



CE-A1255