

SYLVANIA ELECTRIC

RMA Registration Data

TYPE 1AF5

DIODE PENTODE

MECHANICAL DATA

Style	miniature
Cathode	coated filament
Bulb	T- 5 1/2
Base	E7-1, Miniature Button 7-Pin
Outline	5-2
Maximum Diameter	3/4 inch
Maximum Overall Length	2 1/8 inches
Maximum Seated Height	1 7/8 inches
Basing	6AU-0-0
<i>Pin Connections:</i>	
Pin 1 .. negative filament, grid #3	Pin 4 .. grid #2
Pin 2 .. no connection	Pin 5 .. pentode plate
Pin 3 .. diode plate	Pin 6 .. grid #1
	Pin 7 .. positive filament
Mounting Position	any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES

	<u>without shield</u>	<u>with shield⁽¹⁾</u>
Grid to Plate	0.2	0.2 $\mu\mu\text{f}$
Input: g1 to (f+g3+g2)	2.3	2.5 $\mu\mu\text{f}$
Output: p to (f+g3+g2)	2.4	4.3 $\mu\mu\text{f}$
Diode Plate to Grid #1, maximum03	.03 $\mu\mu\text{f}$

RATINGS -- Design Center Values

Filament Voltage ⁽²⁾	1.4	volts
Maximum Plate Voltage (dc)	110	volts
Maximum Grid #2 Voltage (dc)	110	volts
Maximum Positive Grid #1 Voltage (dc)	0	volts
Maximum Cathode Current	2.5	milliamps
Maximum Diode Current (continuous operation)	0.25	milliamps

CHARACTERISTICS

Filament Voltage	1.4	1.4	volts
Filament Current	25	25	milliamps
Plate Voltage (dc)	67.5	90	volts
Grid #2 Voltage (dc)	67.5	90	volts
Grid #1 Voltage (dc)	0	0	volts
Plate Resistance	2.3	2.0	megohms
Transconductance	500	600	micromhos
Plate Current	0.7	1.1	milliamps
Grid #2 Current	0.25	0.4	milliamps
Grid #1 Voltage, for 10 micromhos transconductance..	-2.5	-3.5	volts
Average Diode Current, at 10 volts dc	0.7	0.7	milliamps

(1) Shield #316 connected to Pin 1.

(2) For power-line operation the filament voltage is centered at 1.4 volts for normal line voltage (117 volts).