SYLVANIA ELECTRIC

RMA Registration Data

TYPE 1U6

PENTAGRID CONVERTER

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	7CD-0-0 7DC

Pin Connections:

Pin 1 .. negative filament	Pin 5 .. grid #3 and grid #5
Pin 2 .. plate	Pin 6 .. grid #4
Pin 3 .. grid #2	Pin 7 .. positive filament
Pin 4 .. grid #1	

Mounting Position	any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES

	without shield	*with shield*(1)
Grid #4 to Plate	0.4	0.4 μμf
Grid #4 to Grid #2	0.2	0.2 μμf
Grid #4 to Grid #1	0.2	0.2 μμf
Grid #1 to Grid #2	0.8	0.8 μμf
Grid #4 to All Other Electrodes	8.0	8.0 μμf
Grid #2 to All Except Grid #1	2.2	2.4 μμf
Grid #1 to All Except Grid #2	2.0	2.2 μμf
Plate to All Other Electrodes	7.0	12.0 μμf

RATINGS -- *Design Center Values*

Filament Voltage(2)	1.4 volts
Maximum Plate Voltage (dc)	110 volts
Maximum Grid #3 and Grid #5 Supply Voltage (dc)	110 volts
Maximum Grid #3 and Grid #5 Voltage(3) (dc)	65 volts
Maximum Grid #2 Voltage (dc)	110 volts
Maximum Cathode Current	4.0 milliamps
Minimum Grid #4 Circuit Resistance	1.0 megohm

(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).

(3) Obtained by using a by-passed voltage dropping resistor in series with the plate supply voltage, or by equivalent means.

TYPE 1U6

CHARACTERISTICS[4]

Filament Voltage	1.4	1.4	volts
Filament Current	25	25	milliamps
Plate Voltage (dc)	67.5	90	volts
Grid #3 and Grid #5 Voltage (dc)	45	45	volts
Grid #2 Voltage (dc)	67.5	90	volts
Grid #4 Voltage (dc)	0	0	volts
Grid #1 Resistor	0.2	0.2	megohm
Plate Resistance	0.55	0.60	megohm
Plate Current	0.5	0.55	milliamp
Grid #3 and Grid #5 Current	0.6	0.55	milliamp
Grid #2 Current	0.95	1.1	milliamps
Grid #1 Current	0.028	0.035	milliamp
Total Cathode Current	2.1	2.2	milliamps
Conversion Transconductance	260	275	micromhos
Grid #4 Voltage for Conversion Transconductance Cut-Off[5]	-3	-3	volts
Oscillator Transconductance, with 0 volts on grids #1 and #4		475	micromhos

(4) Grid #1 ..... oscillator grid.
Grid #2 ..... oscillator anode.
Grids #3 & #5 ... screen.
Grid #4 ..... signal.

(5) Approximately 10 micromhos.