SYLVANIA ELECTRIC

RMA Registration Data

TYPE 3E5

BEAM 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 Sealed Height	1 7/8 inches
Basing	6BX-0-0

Pin Connections:

Pin 1 .. negative filament (series connection)
Pin 2 .. plate
Pin 3 .. grid #2
Pin 4 .. no connection
Pin 5 .. negative filament (parallel connection), beam plates
Pin 6 .. grid #1
Pin 7 .. positive filament

Mounting Position ..... any

ELECTRICAL DATA

RATINGS -- *Design Center Values*

	Parallel Filaments	*Series Filaments*	
Filament Voltage(1)	1.4	2.8	volts
Maximum Plate Voltage (dc)	110	110	volts
Maximum Grid #2 Voltage (dc)	110	110	volts
Maximum Cathode Current	8	4(2)	volts

CHARACTERISTICS AND TYPICAL OPERATION

	Parallel Filaments		*Series Filaments*		
Filament Voltage	1.4	1.4	2.8	2.8	volts
Filament Current	50	50	25	25	milliamps
Plate Voltage (dc)	67.5	90	67.5	90	volts
Grid #2 Voltage (dc)	67.5	90	67.5	90	volts
Grid #1 Voltage (dc)	-5.0	-8.0	-5.0	-8.0	volts
Plate Current	5.0	6.0	4.5	5.5	milliamps
Grid #2 Current	1.0	1.5	1.0	1.5	milliamps
Plate Resistance	120,000	140,000	110,000	120,000	ohms
Transconductance	1,300	1,200	1,200	1,100	micromhos
Peak Signal Voltage (af)	5.0	8.0	5.0	8.0	volts
Load Resistance	7,000	8,000	7,000	8,000	ohms
Total Harmonic Distortion	7.5	9.5	10.5	11.0	per cent
Power Output	100	200	90	175	milliwatts

(1) For power-line operation the filament voltage is centered at 1.4 or 2.8 volts respectively with parallel or series filaments for normal line voltage (117 volts).

(2) Each 1.4 volt filament section. (Shunting resistor across negative section of filament is necessary to limit current to value shown.)