

# SYLVANIA ELECTRIC

## RMA Registration Data

### TYPE 6BT6

### DOUBLE - DIODE TRIODE

#### MECHANICAL DATA

Style .....	miniature
Cathode .....	coated, unipotential
Bulb .....	T-5 1/2
Base .....	E7-1, miniature button 7-pin
Outline .....	5-3
Maximum Diameter .....	3/4 inch
Maximum Overall Length .....	2 5/8 inches
Maximum Seated Height .....	2 3/8 inches
Basing .....	7BT-0-2
<i>Pin Connections:</i>	
Pin 1 .. grid	Pin 5 .. #2 diode plate
Pin 2 .. cathode, diode shield	Pin 6 .. #1 diode plate
Pin 3 .. heater	Pin 7 .. triode plate
Pin 4 .. heater	
Mounting Position .....	any

#### ELECTRICAL DATA

##### DIRECT INTERELECTRODE CAPACITANCES

	<u>without shield</u>	<u>with shield</u> <sup>(1)</sup>
#2 Diode Input: #2p to (h+k+i.s.)	1.0	1.0 $\mu\mu\text{f}$
#1 Diode Input: #1p to (h+k+i.s.)	1.0	1.0 $\mu\mu\text{f}$
#1 Diode Plate to Grid, maximum	.013	.01 $\mu\mu\text{f}$

##### RATINGS -- Design Center Values

Heater Voltage (ac or dc) .....	6.3	volts
Maximum Heater-Cathode Voltage .....	90	volts
Maximum Plate Voltage (dc) .....	300	volts
Maximum Positive Grid Voltage (dc) .....	0	volts
Maximum Continuous Diode Current (each plate)..	1.0	milliamp

##### CHARACTERISTICS

Heater Voltage .....	6.3	6.3	volts
Heater Current .....	300	300	milliamps
Plate Voltage (dc) .....	100	250	volts
Grid Voltage (dc) .....	-1	-3	volts
Plate Resistance .....	54,000	58,000	ohms
Plate Current .....	0.8	1.0	milliamp
Transconductance .....	1,300	1,200	micromhos
Amplification Factor .....	70	70	
Diode Current, at 10 volts dc (each plate)			
Minimum .....		1.5	milliamps
Average .....		4.0	milliamps

(1) External shield #316  
connected to Pin 2.