

# SYLVANIA ELECTRIC

## RMA Registration Data

### TYPE 12BK6

#### 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) .....                 | 12.6 | 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 .....       | 12.6   | 12.6   | volts     |
| Heater Current .....       | 150    | 150    | milliamps |
| Plate Voltage (dc) .....   | 100    | 250    | volts     |
| Grid Voltage (dc) .....    | -1     | -2     | volts     |
| Plate Resistance .....     | 80,000 | 62,500 | ohms      |
| Plate Current .....        | 0.5    | 1.2    | milliamps |
| Transconductance .....     | 1,250  | 1,600  | micromhos |
| Amplification Factor ..... | 100    | 100    |           |

##### Diode Current, at 10 volts dc (each plate)

|               |     |           |
|---------------|-----|-----------|
| Minimum ..... | 1.5 | milliamps |
| Average ..... | 4.0 | milliamps |

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