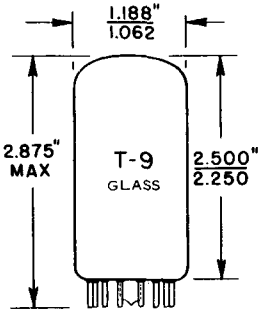
**TUNG-SOL**

# DIODE

COMPACTRON

OUTLINE DRAWING
JEDEC 9-60



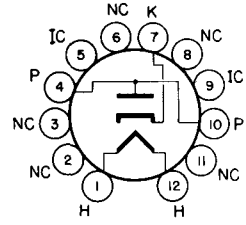

BASE 12 PIN BUTTON
JEDEC E12-70

FOR TV DAMPING
DIODE APPLICATIONS

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION

BASING DIAGRAM
JEDEC 12GA




BOTTOM VIEW

BASING DIAGRAM
JEDEC 12GA
SOCKET TERMINALS 5,6,8 AND 9 SHOULD NOT BE USED AS TIE POINTS. IT IS FURTHER RECOMMENDED THAT THE SOCKET CLIPS FOR THESE PINS BE REMOVED.

THE 6BE3A IS A COMPACTRON, SINGLE HEATER-CATHODE TYPE DIODE INTENDED FOR SERVICE AS THE DAMPING DIODE IN THE HORIZONTAL DEFLECTION CIRCUIT OF TELEVISION RECEIVERS. EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, THE 6BE3A IS IDENTICAL TO THE 12BE3A AND THE 17BE3A. THE VOLTAGE DROP OF THIS TYPE IS LOWER THAN THAT OF THE 6BE3.

## DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

| | | |
|---|---|---|
| CATHODE TO PLATE AND HEATER: K TO (P + H) | 10 | pf |
| PLATE TO CATHODE AND HEATER: P TO (K + H) | 8.0 | pf |
| HEATER TO CATHODE: (H TO K) | 3.4 | pf |

## HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

| | | | | |
|---|---|---|---|---|
| AVERAGE CHARACTERISTICS | 6.3 | VOLTS | 1200 | MA |
| HEATER SUPPLY LIMITS: | | | | |
| VOLTAGE OPERATION - AC OR DC | | | 6.3 ± 0.6 | VOLTS |
| MAXIMUM HEATER-CATHODE VOLTAGE: | | | | |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | | | | |
| DC COMPONENT | | | 900 | VOLTS |
| TOTAL DC AND PEAK | | | 5000 | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE | | | | |
| DC COMPONENT | | | 100 | VOLTS |
| TOTAL DC AND PEAK | | | 300 | VOLTS |

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## MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

TV DAMPER SERVICE SEE BELOW

| | | |
|---|---|---|
| PEAK INVERSE PLATE VOLTAGE | 5000 | VOLTS |
| PLATE DISSIPATION | 6.5 | WATTS |
| STEADY STATE PEAK PLATE CURRENT | 1200 | MA |
| DC OUTPUT CURRENT | 200 | MA |

FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN 'STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERAL COMMUNICATIONS COMMISSION'. THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15 PERCENT OF ONE SCANNING CYCLE.

## AVERAGE CHARACTERISTICS

| | | |
|---|---|---|
| TUBE VOLTAGE DROP, Ib = 350 MA. DC | 22.5 | VOLTS |