

New Jersey Semi-Conductor Products, Inc.

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Silicon NPN Power Transistor

2SC937

DESCRIPTION

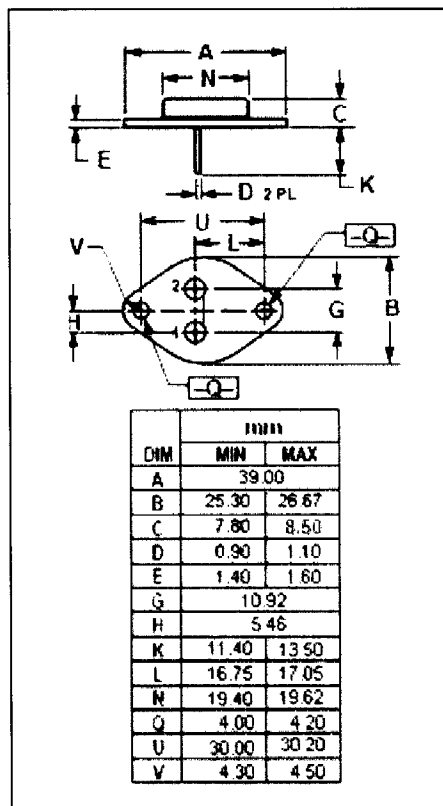
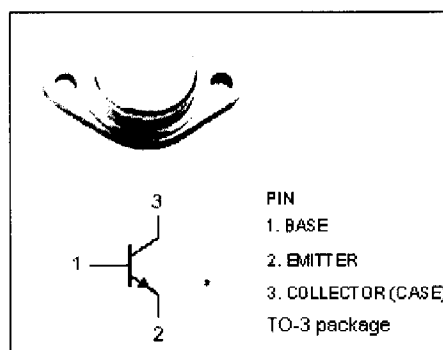
- High Breakdown Voltage-
 : $V_{CBO} = 1200V(\text{Min})$
- High Reliability

APPLICATIONS

- Designed for TV horizontal deflection output applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 1200 | V |
| V_{CEO} | Collector-Emitter Voltage | 500 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current- Continuous | 2.5 | A |
| I_{CP} | Collector Current-Pulse | 6 | A |
| P_C | Collector Power Dissipation @ $T_c = 25^\circ\text{C}$ | 22 | W |
| T_J | Junction Temperature | 125 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -45~125 | $^\circ\text{C}$ |



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

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ELECTRICAL CHARACTERISTICS

 $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|---|-----|------|-----|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C=10\text{mA}; R_{BE}=\infty$ | 500 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=2.5\text{A}; I_B=0.8\text{A}$ | | | 5.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C=2.5\text{A}; I_B=0.8\text{A}$ | | | 1.8 | V |
| I_{CBX} | Collector Cutoff Current | $V_{CB}=1200\text{V}; V_{EB}=1.5\text{V}$ | | | 1 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}=6\text{V}; I_C=0$ | | | 0.2 | mA |
| t_f | Fall Time | $I_C=2.5\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.1\text{A}; L_B=10\mu\text{H}$ | | | 1.2 | μs |