

**isc Silicon NPN Darlington Power Transistor**
**2SD469**
**DESCRIPTION**

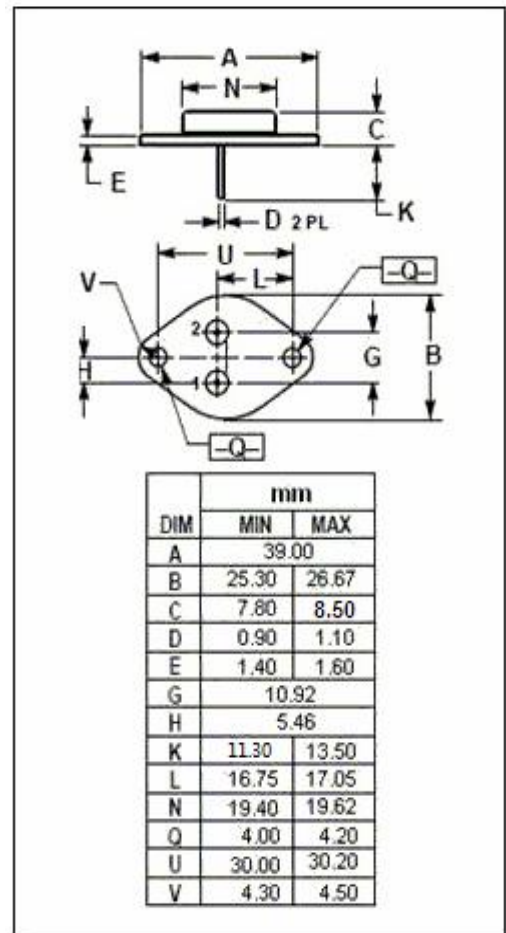
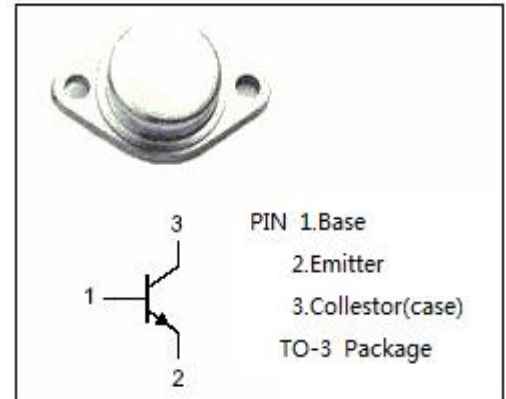
- Low Collector-Emitter Breakdown Voltage  
 $V_{(BR)CEO} = 110V$  (Min)
- Collector Power Dissipation
- $P_c = 100W @ T_C = 25^\circ C$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in converters, inverters, switching regulators, motor control systems etc.

**ABSOLUTE MAXIMUM RATINGS( $T_C = 25^\circ C$ )**

| SYMBOL    | PARAMETER                                       | VALUE   | UNIT       |
|-----------|---|---------|------------|
| $V_{CBO}$ | Collector-Base Voltage                          | 150     | V          |
| $V_{CEO}$ | Collector-Emitter Voltage                       | 110     | V          |
| $V_{EBO}$ | Emitter-Base Voltage                            | 10      | V          |
| $I_C$     | Collector Current -Continuous                   | 10      | A          |
| $P_C$     | Collector Power Dissipation@ $T_C = 25^\circ C$ | 100     | W          |
| $T_j$     | Junction Temperature                            | 150     | $^\circ C$ |
| $T_{stg}$ | Storage Temperature                             | -65~150 | $^\circ C$ |



**isc Silicon NPN Darlington Power Transistor****2SD469****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

| SYMBOL               | PARAMETER                            | CONDITIONS                                 | MIN | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|-----|------|
| V <sub>(BR)CEO</sub> | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0 | 110 |     | V    |
| V <sub>CE(sat)</sub> | Collector-Emitter Saturation Voltage | I <sub>C</sub> = 3A; I <sub>B</sub> = 0.3A |     | 1.0 | V    |
| V <sub>BE(sat)</sub> | Base-Emitter Saturation voltage      | I <sub>C</sub> = 3A; I <sub>B</sub> = 0.3A |     | 1.5 | V    |
| I <sub>CBO</sub>     | Collector Cutoff current             | V <sub>CB</sub> = 150V; I <sub>E</sub> =0  |     | 100 | μ A  |
| I <sub>EBO</sub>     | Emitter Cut-off current              | V <sub>EB</sub> = 8V; I <sub>C</sub> = 0   |     | 0.1 | mA   |
| h <sub>FE</sub>      | DC Current Gain                      | I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V | 40  | 80  | 200  |

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