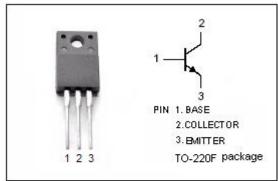


# **ISC Silicon NPN Power Transistor**

2SC4327

## **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 35V(Min)
- · Low Collector Saturation Voltage-
  - :  $V_{CE(sat)} = 0.5V(Max)@ (I_C = 5A, I_B = 0.3A)$
- Complement to Type 2SA1643
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

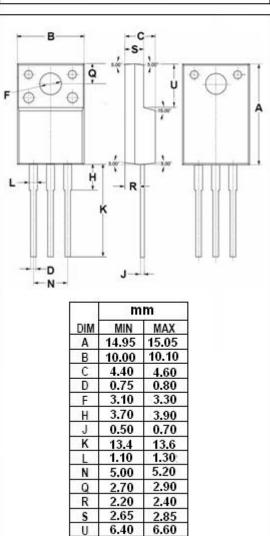


### **APPLICATIONS**

· Designed for power switching applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL           | PARAMETER  | VALUE   | UNIT       |  |
|------------------|--|---------|------------|--|
| $V_{CBO}$        | Collector-Base Voltage                               | 50      | V          |  |
| V <sub>CEO</sub> | Collector-Emitter Voltage                            | 35      | V          |  |
| V <sub>EBO</sub> | Emitter-Base Voltage                                 | 7       | V          |  |
| Ic               | Collector Current-Continuous                         | 7       | А          |  |
| Pc               | Collector Power Dissipation<br>@T <sub>C</sub> =25°C | 25      | W          |  |
| TJ               | Junction Temperature                                 | 150     | $^{\circ}$ |  |
| T <sub>stg</sub> | Storage Temperature                                  | -55~150 | $^{\circ}$ |  |





# **ISC Silicon NPN Power Transistor**

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### **ELECTRICAL CHARACTERISTICS**

Tj=25℃ unless otherwise specified

| SYMBOL                | PARAMETER                            | CONDITIONS                                  | MIN | TYP. | MAX | UNIT       |
|-----------------------|--------------------------------------|---|-----|------|-----|------------|
| V <sub>(BR)</sub> CEO | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = 25mA; I <sub>B</sub> = 0   | 35  |      |     | V          |
| V <sub>(BR)EBO</sub>  | Emitter-Base Breakdown Voltage       | I <sub>E</sub> = 1mA; I <sub>C</sub> = 0    | 7   |      |     | V          |
| V <sub>CE</sub> (sat) | Collector-Emitter Saturation Voltage | I <sub>C</sub> = 5A; I <sub>B</sub> = 0.3A  |     |      | 0.5 | V          |
| V <sub>BE</sub> (sat) | Base-Emitter Saturation Voltage      | I <sub>C</sub> = 5A; I <sub>B</sub> = 0.3A  |     |      | 1.2 | V          |
| Ісво                  | Collector Cutoff Current             | V <sub>CB</sub> = 50V; I <sub>E</sub> = 0   |     |      | 10  | μА         |
| І <sub>ЕВО</sub>      | Emitter Cutoff Current               | V <sub>EB</sub> = 7V; I <sub>C</sub> = 0    |     |      | 10  | μ <b>А</b> |
| h <sub>FE</sub>       | DC Current Gain                      | I <sub>C</sub> = 5A; V <sub>CE</sub> = 2V   | 50  |      |     |            |
| f⊤                    | Current-Gain—Bandwidth Product       | I <sub>E</sub> = -1A; V <sub>CE</sub> = 12V |     | 115  |     | MHz        |

## **NOTICE:**

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