

## isc Silicon PNP Power Transistor

## 2SAR572D

## DESCRIPTION

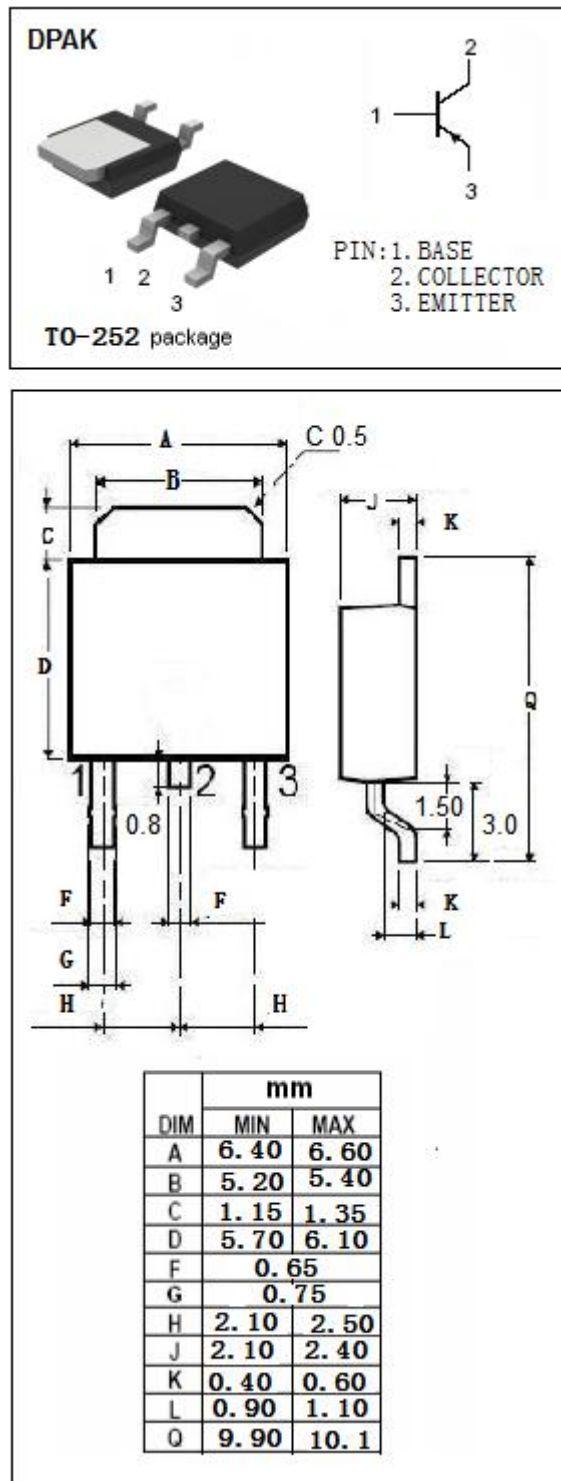
- Suitable for middle power drivers
- Low  $V_{CE(sat)}$   
 $V_{CE(sat)} \leq -0.4V @ (I_C = -2A, I_B = -0.1A)$
- Complementary NPN types: 2SCR572D
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Low frequency amplifier

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

| SYMBOL    | PARAMETER   | VALUE   | UNIT             |
|-----------|---|---------|------------------|
| $V_{CBO}$ | Collector-Base Voltage                                  | -30     | V                |
| $V_{CEO}$ | Collector-Emitter Voltage                               | -30     | V                |
| $V_{EBO}$ | Emitter-Base Voltage                                    | -6      | V                |
| $I_C$     | Collector Current-Continuous                            | -5      | A                |
| $I_{CM}$  | Collector Current-Peak                                  | -10     | A                |
| $P_C$     | Collector Power Dissipation<br>@ $T_C=25^\circ\text{C}$ | 10      | W                |
| $T_J$     | Junction Temperature                                    | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage Temperature Range                               | -55~150 | $^\circ\text{C}$ |



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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

| SYMBOL                         | PARAMETER                            | CONDITIONS   | MIN | TYP. | MAX  | UNIT |
|--------------------------------|--------------------------------------|--|-----|------|------|------|
| BV <sub>CBO</sub>              | Collector-Base breakdown voltage     | I <sub>C</sub> =-100uA                                   | -30 |      |      | V    |
| BV <sub>CEO</sub>              | Collector-Emitter breakdown voltage  | I <sub>C</sub> =-1mA                                     | -30 |      |      | V    |
| BV <sub>EBO</sub>              | Emitter-Base breakdown voltage       | I <sub>E</sub> =-100uA                                   | -6  |      |      | V    |
| V <sub>CE(sat)</sub>           | Collector-Emitter Saturation Voltage | I <sub>C</sub> = -2A; I <sub>B</sub> = -100mA            |     |      | -0.4 | V    |
| I <sub>CBO</sub>               | Collector Cutoff Current             | V <sub>CB</sub> = -30V; I <sub>E</sub> = 0               |     |      | -1.0 | μ A  |
| I <sub>EBO</sub>               | Emitter Cutoff Current               | V <sub>EB</sub> = -4V; I <sub>C</sub> = 0                |     |      | -1.0 | μ A  |
| h <sub>FE</sub>                | DC Current Gain                      | I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -3V            | 200 |      | 500  |      |
| C <sub>OB</sub>                | Output Capacitance                   | I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f= 1.0MHz    |     | 40   |      | pF   |
| f <sub>T</sub> <sup>NOTE</sup> | Current-Gain—Bandwidth Product       | I <sub>C</sub> = -0.2A; V <sub>CE</sub> = -10V,f= 100MHz |     | 300  |      | MHz  |

NOTE:Pulsed

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