

isc Silicon NPN Power Transistor

2SC2073

DESCRIPTION

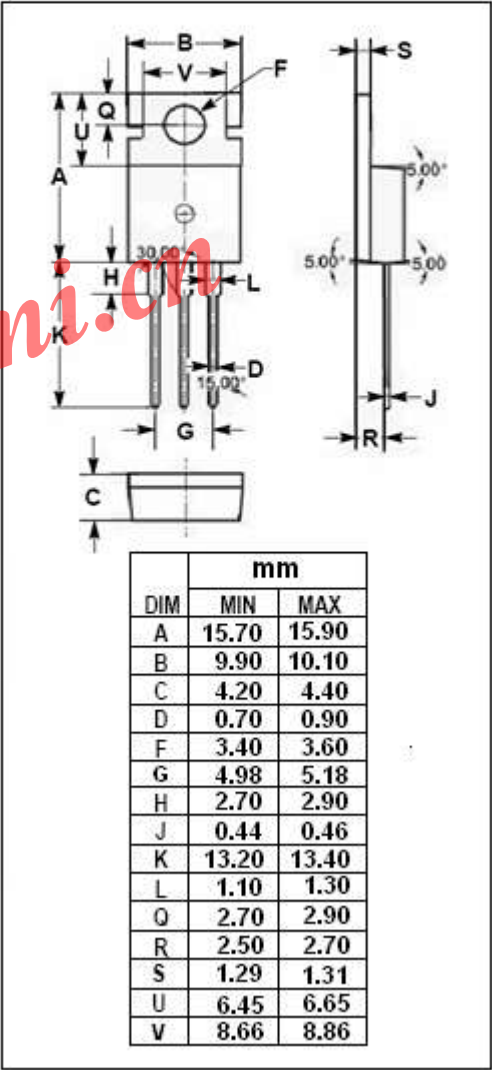
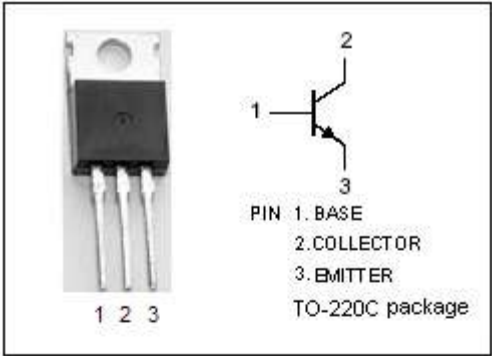
- Collector-Emitter Breakdown Voltage-  
:V<sub>(BR)CEO</sub>= 150V(Min)
- Wide Area of Safe Operation
- Complement to Type 2SA940

APPLICATIONS

- Power amplifier applications.
- Vertical output applications.

ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

| SYMBOL           | PARAMETER                                             | VALUE   | UNIT |
|------------------|-------------------------------------------------------|---------|------|
| V <sub>CBO</sub> | Collector-Base Voltage                                | 150     | V    |
| V <sub>CEO</sub> | Collector-Emitter Voltage                             | 150     | V    |
| V <sub>EBO</sub> | Emitter-Base Voltage                                  | 5       | V    |
| I <sub>C</sub>   | Collector Current-Continuous                          | 1.5     | A    |
| I <sub>B</sub>   | Base Current-Continuous                               | 0.5     | A    |
| P <sub>C</sub>   | Collector Power Dissipation<br>@ T <sub>a</sub> =25°C | 1.5     | W    |
|                  | Collector Power Dissipation<br>@ T <sub>C</sub> =25°C | 25      |      |
| T <sub>J</sub>   | Junction Temperature                                  | 150     | °C   |
| T <sub>stg</sub> | Storage Temperature Range                             | -55~150 | °C   |



**ISC Silicon NPN Power Transistor****2SC2073****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

| SYMBOL               | PARAMETER                            | CONDITIONS                                                          | MIN | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|---------------------------------------------------------------------|-----|------|------|------|
| V <sub>CE(sat)</sub> | Collector-Emitter Saturation Voltage | I <sub>C</sub> = 500mA; I <sub>B</sub> = 50mA                       |     |      | 1.5  | V    |
| V <sub>BE(on)</sub>  | Base-Emitter On Voltage              | I <sub>C</sub> = 500mA ; V <sub>CE</sub> = 10V                      |     |      | 0.85 | V    |
| I <sub>CBO</sub>     | Collector Cutoff Current             | V <sub>CB</sub> = 120V ; I <sub>E</sub> = 0                         |     |      | 10   | μ A  |
| I <sub>EBO</sub>     | Emitter Cutoff Current               | V <sub>EB</sub> = 5V; I <sub>C</sub> = 0                            |     |      | 10   | μ A  |
| h <sub>FE</sub>      | DC Current Gain                      | I <sub>C</sub> = 500mA ; V <sub>CE</sub> = 10V                      | 40  |      | 140  |      |
| C <sub>OB</sub>      | Output Capacitance                   | I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1MHz |     | 35   |      | pF   |
| f <sub>T</sub>       | Current-Gain—Bandwidth Product       | I <sub>C</sub> = 500mA; V <sub>CE</sub> = 10V                       |     | 4    |      | MHz  |

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