

## isc Silicon NPN Power Transistor

2SC1756

### **DESCRIPTION**

- · High breakdown voltage
- · Large collector dissipation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

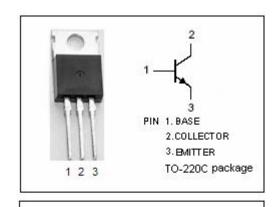
# (2)

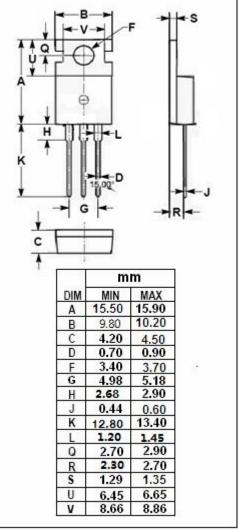
## **APPLICATIONS**

- AF output of color TV for video output
- AF output of B/W TV



| SYMBOL           | PARAMETER                            | VALUE   | UNIT         |
|------------------|--------------------------------------|---------|--------------|
| Vсво             | Collector-Base Voltage               | 300     | V            |
| V <sub>CEO</sub> | Collector-Emitter Voltage            | 300     | V            |
| V <sub>EBO</sub> | Emitter-Base Voltage                 | 7       | V            |
| Ic               | Collector Current-Continuous         | 0.2     | А            |
| Pc               | Collector Power Dissipation @ Tc=25℃ | 15      | W            |
| TJ               | Junction Temperature                 | 150     | $^{\circ}$ C |
| T <sub>stg</sub> | Storage Temperature Range            | -45~150 | $^{\circ}$ C |







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## **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

| SYMBOL                | PARAMETER                            | CONDITIONS                                   | MIN | TYP. | MAX | UNIT |  |  |  |
|-----------------------|--------------------------------------|--|-----|------|-----|------|--|--|--|
| V <sub>(BR)</sub> CEO | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0   | 300 |      |     | V    |  |  |  |
| V <sub>CE(sat)</sub>  | Collector-Emitter Saturation Voltage | I <sub>C</sub> = 50mA; I <sub>B</sub> = 5mA  |     |      | 2.0 | V    |  |  |  |
| Ісво                  | Collector Cutoff Current             | V <sub>CB</sub> = 250V ; I <sub>E</sub> = 0  |     |      | 0.1 | μА   |  |  |  |
| I <sub>EBO</sub>      | Emitter Cutoff Current               | V <sub>EB</sub> = 5V; I <sub>C</sub> = 0     |     |      | 10  | μА   |  |  |  |
| h <sub>FE</sub>       | DC Current Gain                      | I <sub>C</sub> = 10mA; V <sub>CE</sub> = 10V | 40  |      | 200 |      |  |  |  |

## ♦ h<sub>FE</sub> Classifications

| С     | D      | E       |
|-------|--------|---------|
| 40-80 | 60-120 | 100-200 |

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