

# isc Silicon NPN Power Transistor

## 2SC1722

### DESCRIPTION

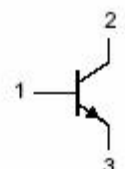
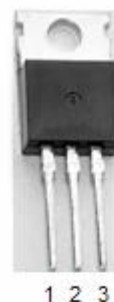
- Silicon NPN triple diffused mesa
- High breakdown voltage
- Large collector dissipation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

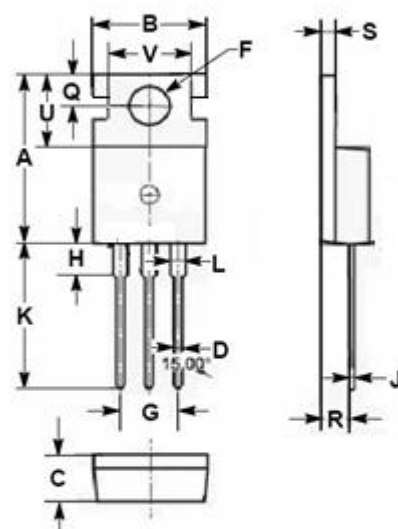
- Low frequency power amplifier
- TV horizontal/vertical drivers

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

| SYMBOL    | PARAMETER   | VALUE   | UNIT               |
|-----------|---|---------|--------------------|
| $V_{CBO}$ | Collector-Base Voltage                                    | 300     | V                  |
| $V_{CEO}$ | Collector-Emitter Voltage                                 | 300     | V                  |
| $V_{EBO}$ | Emitter-Base Voltage                                      | 5       | V                  |
| $I_c$     | Collector Current-Continuous                              | 0.2     | A                  |
| $P_c$     | Collector Power Dissipation<br>@ $T_c=25^{\circ}\text{C}$ | 1.8     | W                  |
| $T_J$     | Junction Temperature                                      | 150     | $^{\circ}\text{C}$ |
| $T_{stg}$ | Storage Temperature Range                                 | -45~150 | $^{\circ}\text{C}$ |



PIN 1. BASE  
2. COLLECTOR  
3. EMITTER  
TO-220C package



| DIM | mm    |       |
|-----|-------|-------|
|     | MIN   | MAX   |
| A   | 15.50 | 15.90 |
| B   | 9.80  | 10.20 |
| C   | 4.20  | 4.50  |
| D   | 0.70  | 0.90  |
| F   | 3.40  | 3.70  |
| G   | 4.98  | 5.18  |
| H   | 2.68  | 2.90  |
| J   | 0.44  | 0.60  |
| K   | 12.80 | 13.40 |
| L   | 1.20  | 1.45  |
| Q   | 2.70  | 2.90  |
| R   | 2.30  | 2.70  |
| S   | 1.29  | 1.35  |
| U   | 6.45  | 6.65  |
| V   | 8.66  | 8.86  |

**isc Silicon NPN Power Transistor****2SC1722****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

| SYMBOL               | PARAMETER                            | CONDITIONS                                    | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V <sub>(BR)CEO</sub> | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = 5mA ; 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    |
| V <sub>BE(ON)</sub>  | Base-Emitter ON Voltage              | I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 10V |     |      | 0.9 | V    |
| I <sub>CBO</sub>     | Collector Cutoff Current             | V <sub>CB</sub> = 250V ; I <sub>E</sub> = 0   |     |      | 0.1 | 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> = 50mA ; V <sub>CE</sub> = 10V | 50  |      | 300 |      |

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