

isc Silicon PNP Power Transistor

2SA753

DESCRIPTION

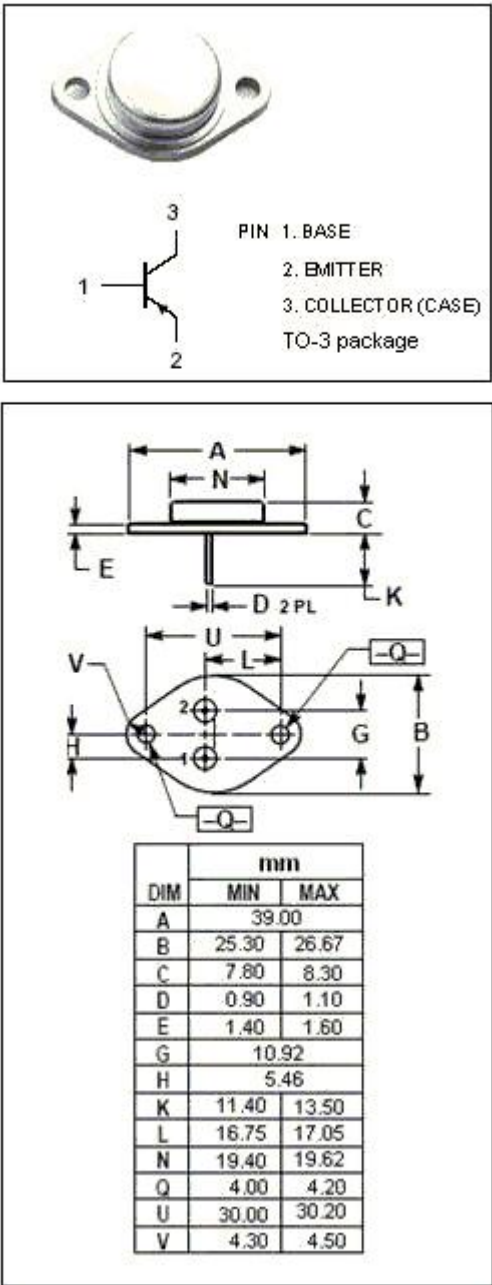
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -110V(\text{Min.})$
- Complement to Type 2SC1343

APPLICATIONS

- Designed for 100W audio amplifier power output applications.

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

| SYMBOL    | PARAMETER                                                 | VALUE   | UNIT               |
|-----------|-----------------------------------------------------------|---------|--------------------|
| $V_{CBO}$ | Collector-Base Voltage                                    | -140    | V                  |
| $V_{CEO}$ | Collector-Emitter Voltage                                 | -110    | V                  |
| $V_{EBO}$ | Emitter-Base Voltage                                      | -5      | V                  |
| $I_C$     | Collector Current-Continuous                              | -10     | A                  |
| $I_C$     | Collector Current-Peak                                    | -12     | A                  |
| $P_C$     | Collector Power Dissipation<br>@ $T_c=25^{\circ}\text{C}$ | 100     | W                  |
| $T_j$     | Junction Temperature                                      | 150     | $^{\circ}\text{C}$ |
| $T_{stg}$ | Storage Temperature                                       | -55~150 | $^{\circ}\text{C}$ |



**isc Silicon PNP Power Transistor****2SA753****ELECTRICAL CHARACTERISTICS****T<sub>j</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> = -50mA; R <sub>BE</sub> = ∞  | -110 |      |      | V    |
| V <sub>(BR)CBO</sub> | Collector-Base Breakdown Voltage     | I <sub>C</sub> = -5mA; I <sub>E</sub> = 0    | -140 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-Base Breakdown Voltage       | I <sub>E</sub> = -5mA; I <sub>C</sub> = 0    | -5   |      |      | V    |
| V <sub>CE(sat)</sub> | Collector-Emitter Saturation Voltage | I <sub>C</sub> = -5A; I <sub>B</sub> = -1A   |      |      | -1.5 | V    |
| V <sub>BE(on)</sub>  | Base-Emitter On Voltage              | I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V  |      |      | -1.5 | V    |
| I <sub>CBO</sub>     | Collector Cutoff Current             | V <sub>CB</sub> = -30V; I <sub>E</sub> = 0   |      |      | -1   | mA   |
| h <sub>FE-1</sub>    | DC Current Gain                      | I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V  | 30   |      | 200  |      |
| h <sub>FE-2</sub>    | DC Current Gain                      | I <sub>C</sub> = -10A; V <sub>CE</sub> = -5V | 15   |      |      |      |
| f <sub>T</sub>       | Current-Gain—Bandwidth Product       | I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V  |      | 20   |      | MHz  |

**◆ h<sub>FE-1</sub> Classifications**

| A     | B      | C       |
|-------|--------|---------|
| 30-60 | 50-120 | 100-200 |