

isc Silicon NPN Power Transistor

2SC2665

DESCRIPTION

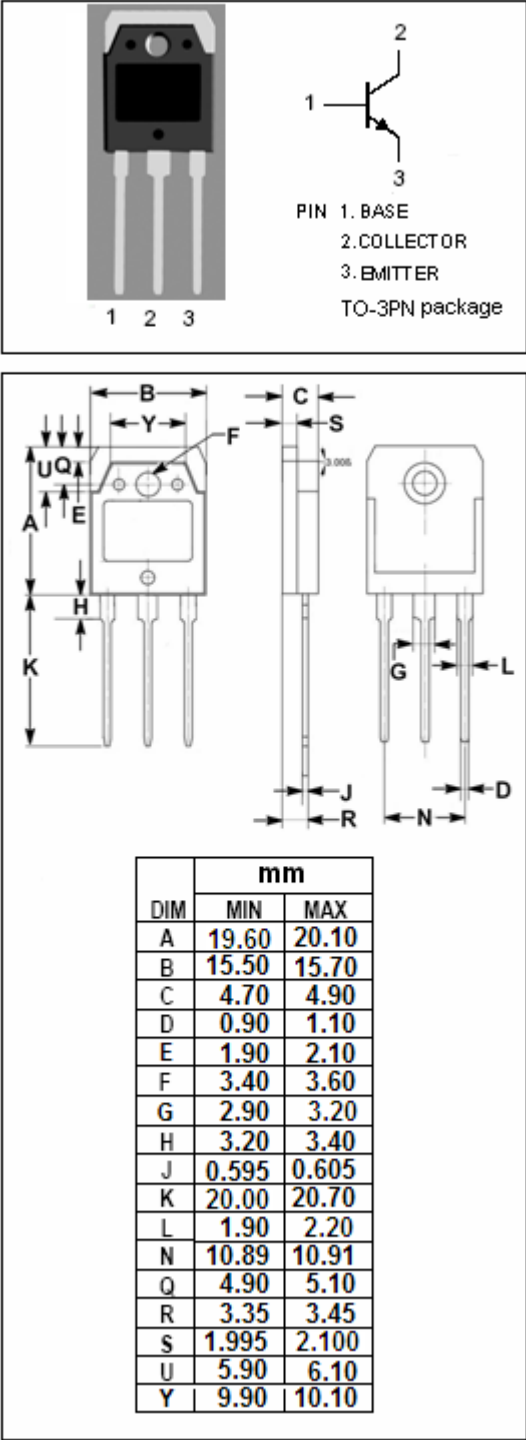
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO}=80V(\text{Min})$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for audio frequency power amplifier applications.

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

| SYMBOL    | PARAMETER                                                 | VALUE   | UNIT               |
|-----------|-----------------------------------------------------------|---------|--------------------|
| $V_{CBO}$ | Collector-Base Voltage                                    | 100     | V                  |
| $V_{CEO}$ | Collector-Emitter Voltage                                 | 80      | V                  |
| $V_{EBO}$ | Emitter-Base Voltage                                      | 6       | V                  |
| $I_C$     | Collector Current-Continuous                              | 4       | A                  |
| $P_C$     | Collector Power Dissipation<br>@ $T_C=25^{\circ}\text{C}$ | 55      | W                  |
| $T_J$     | Junction Temperature                                      | 150     | $^{\circ}\text{C}$ |
| $T_{stg}$ | Storage Temperature Range                                 | -40~150 | $^{\circ}\text{C}$ |



**isc Silicon NPN Power Transistor****2SC2665****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS                           | MIN | TYP. | MAX | UNIT          |
|---------------|--------------------------------------|--------------------------------------|-----|------|-----|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage  | $I_C=50\text{mA}$ ; $R_{BE}=\infty$  | 80  |      |     | V             |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage     | $I_C=1\text{mA}$ ; $I_E=0$           | 100 |      |     | V             |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage       | $I_E=1\text{mA}$ ; $I_C=0$           | 6   |      |     | V             |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=3\text{A}$ ; $I_B=0.3\text{A}$  |     |      | 1.5 | V             |
| $I_{CBO}$     | Collector Cutoff Current             | $V_{CB}=100\text{V}$ ; $I_E=0$       |     |      | 100 | $\mu\text{A}$ |
| $I_{EBO}$     | Emitter Cutoff Current               | $V_{EB}=4\text{V}$ ; $I_C=0$         |     |      | 100 | $\mu\text{A}$ |
| $h_{FE-1}$    | DC Current Gain                      | $I_C=1\text{A}$ ; $V_{CE}=4\text{V}$ | 40  |      |     |               |
| $h_{FE-2}$    | DC Current Gain                      | $I_C=4\text{A}$ ; $V_{CE}=4\text{V}$ | 20  |      |     |               |
| $f_T$         | Current-Gain—Bandwidth Product       | $I_C=1\text{A}$ ; $V_{CE}=5\text{V}$ |     | 10   |     | MHz           |