

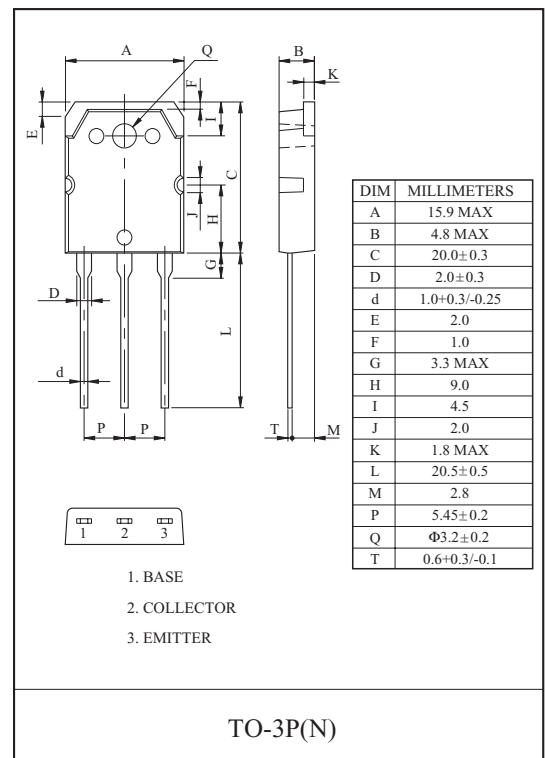
HIGH POWER AMPLIFIER APPLICATION.

## FEATURES

- Recommended for 75W Audio Frequency Amplifier Output Stage.
- Complementary to TIP36C.
- $I_{Cmax}$ :25A.

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

| CHARACTERISTIC                                            | SYMBOL    | RATING    | UNIT             |
|-----------------------------------------------------------|-----------|-----------|------------------|
| Collector-Base Voltage                                    | $V_{CBO}$ | 100       | V                |
| Collector-Emitter Voltage                                 | $V_{CEO}$ | 100       | V                |
| Emitter-Base Voltage                                      | $V_{EBO}$ | 5         | V                |
| Collector Current                                         | $I_C$     | 25        | A                |
| Base Current                                              | $I_B$     | 5.0       | A                |
| Collector Power Dissipation<br>( $T_c=25^\circ\text{C}$ ) | $P_C$     | 125       | W                |
| Junction Temperature                                      | $T_j$     | 150       | $^\circ\text{C}$ |
| Storage Temperature Range                                 | $T_{stg}$ | -55 ~ 150 | $^\circ\text{C}$ |

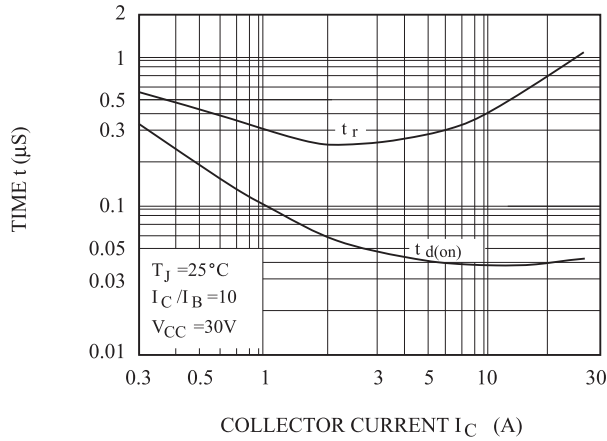
ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

| CHARACTERISTIC                       | SYMBOL             | TEST CONDITION        | MIN. | TYP. | MAX. | UNIT          |
|--------------------------------------|--------------------|-----------------------|------|------|------|---------------|
| Collector Cut-off Current            | $I_{CBO}$          | $V_{CB}=100V, I_E=0$  | -    | -    | 10   | $\mu\text{A}$ |
| Emitter Cut-off Current              | $I_{EBO}$          | $V_{EB}=5V, I_C=0$    | -    | -    | 10   | $\mu\text{A}$ |
| Collector-emitter Breakdown Voltage  | $V_{(BR)CEO}$      | $I_C=50mA, I_B=0$     | 100  | -    | -    | V             |
| DC Current Gain                      | $h_{FE}(1)$ (Note) | $V_{CE}=5V, I_C=1.5A$ | 55   | -    | 160  |               |
|                                      | $h_{FE}(2)$        | $V_{CE}=4V, I_C=15A$  | 15   | -    | -    |               |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}(1)$   | $I_C=15A, I_B=1.5A$   | -    | -    | 1.8  | V             |
|                                      | $V_{CE(sat)}(2)$   | $I_C=25A, I_B=5.0A$   | -    | -    | 4.0  |               |
| Base-Emitter Voltage                 | $V_{BE}$           | $V_{CE}=5V, I_C=5A$   | -    | -    | 1.5  | V             |
| Transition Frequency                 | $f_T$              | $V_{CE}=5V, I_C=1A$   | 3.0  | -    | -    | MHz           |

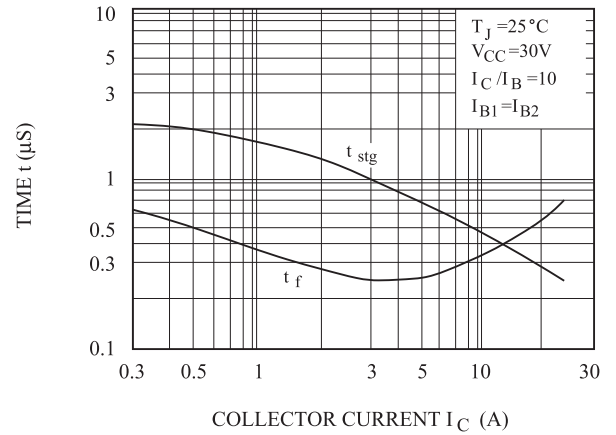
Note :  $h_{FE}(1)$  Classification R:55~110, O:80~160

# TIP35C

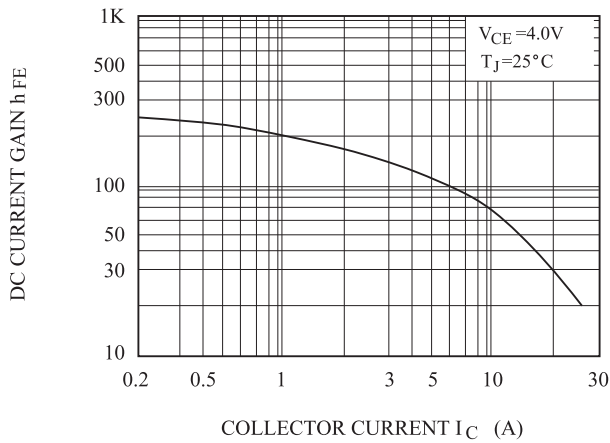
SWITCHING CHARACTERISTICS



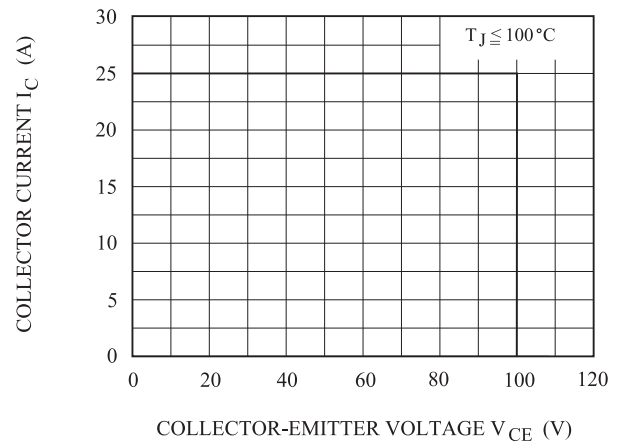
SWITCHING CHARACTERISTICS



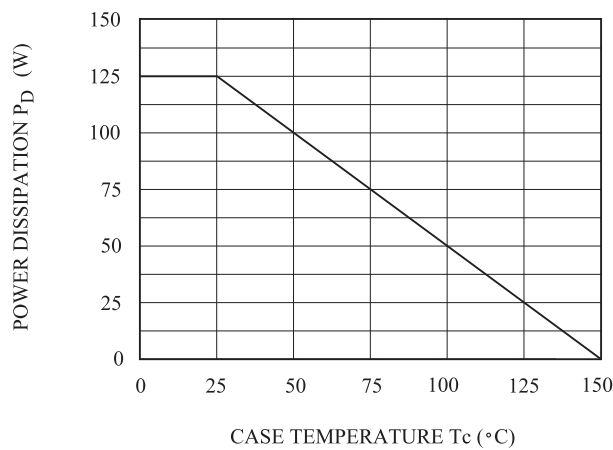
$h_{FE} - I_C$



REVERSE BIAS SAFE OPERATING AREA



$P_D - T_c$



FORWARD BIAS SAFE OPERATING AREA

