

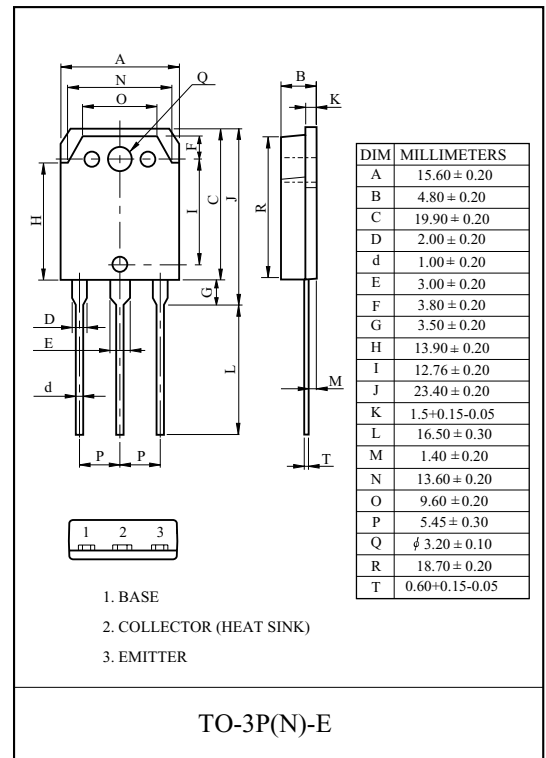
HIGH POWER AMPLIFIER APPLICATION.

### FEATURES

- Recommended for 75W Audio Frequency Amplifier Output Stage.
- Complementary to TIP35CA.
- $I_{Cmax}:-25A$ .

### MAXIMUM RATING (Ta=25 °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>(Tc=25 °C) | $P_C$     | 125       | W    |
| Junction Temperature                      | $T_j$     | 150       | °C   |
| Storage Temperature Range                 | $T_{stg}$ | -55 ~ 150 | °C   |



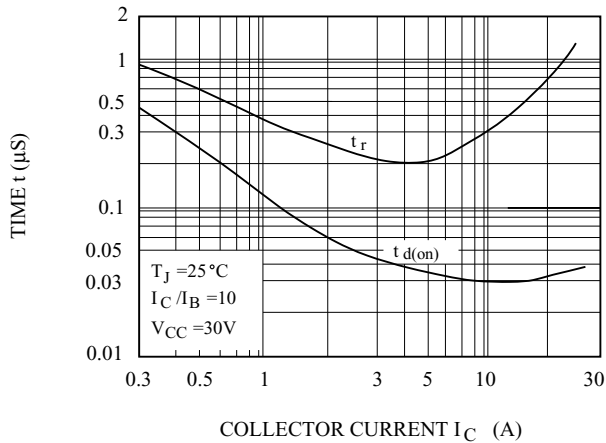
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC                       | SYMBOL             | TEST CONDITION          | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|-------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$          | $V_{CB}=-100V, I_E=0$   | -    | -    | -10  | μA   |
| Emitter Cut-off Current              | $I_{EBO}$          | $V_{EB}=-5V, I_C=0$     | -    | -    | -10  | μA   |
| 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  |

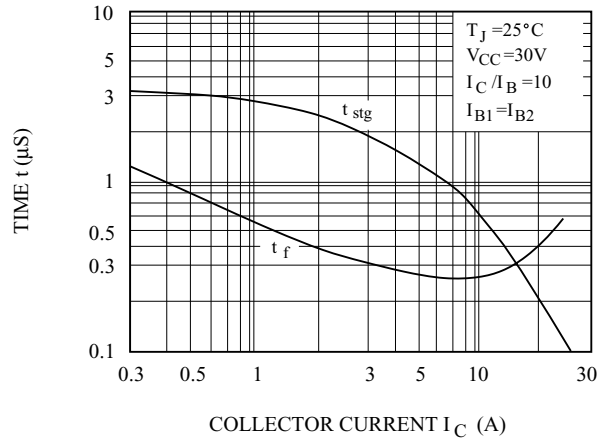
Note :  $h_{FE}(1)$  Classification R:55~110, O:80~160

# TIP36CA

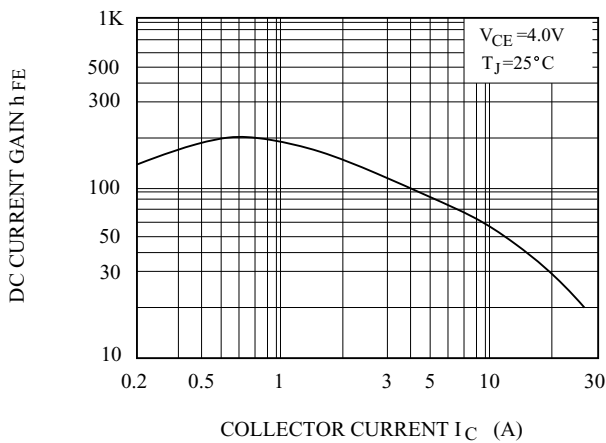
SWITCHING CHARACTERISTICS



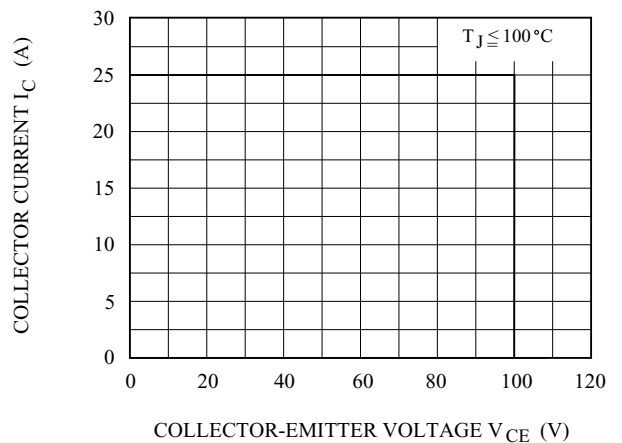
SWITCHING CHARACTERISTICS



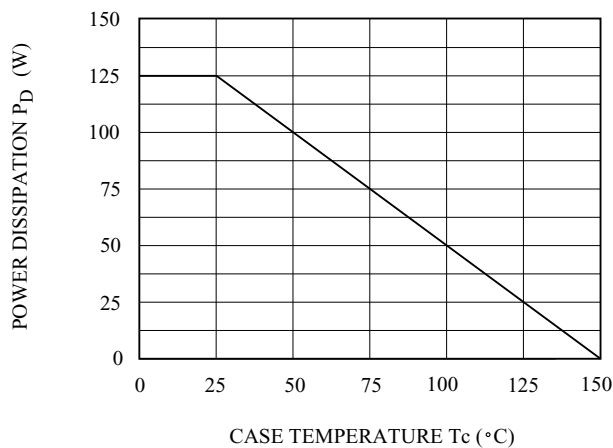
$h_{FE} - I_C$



REVERSE BIAS SAFE OPERATING AREA



$P_D - T_c$



FORWARD BIAS SAFE OPERATING AREA

