

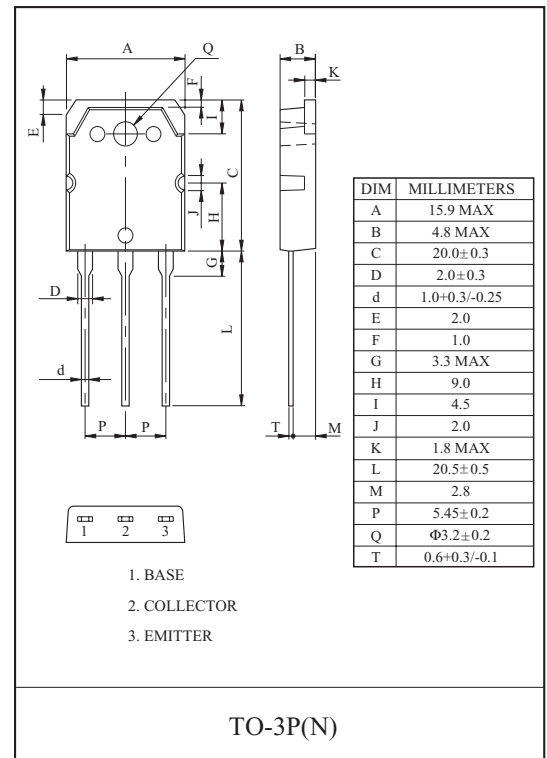
HIGH POWER AMPLIFIER APPLICATION.

### 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 | $^\circ\text{C}$ |



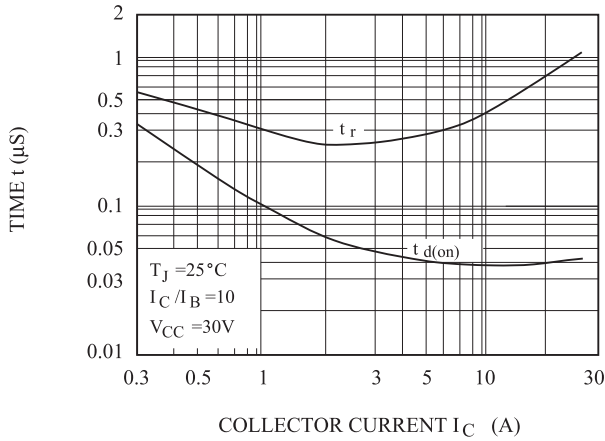
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

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

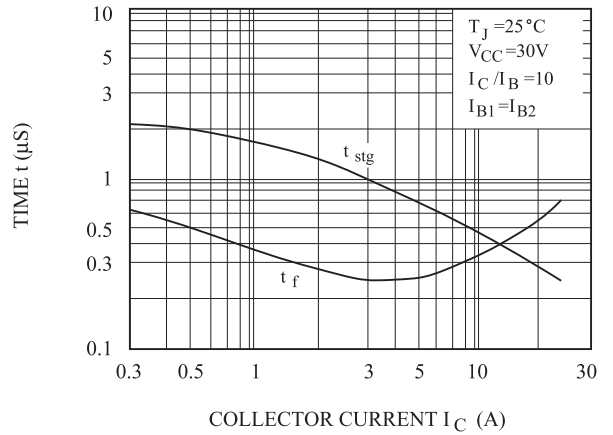
Note :  $h_{FE(1)}$  Classification R:55~110, O:80~160

# TIP35C

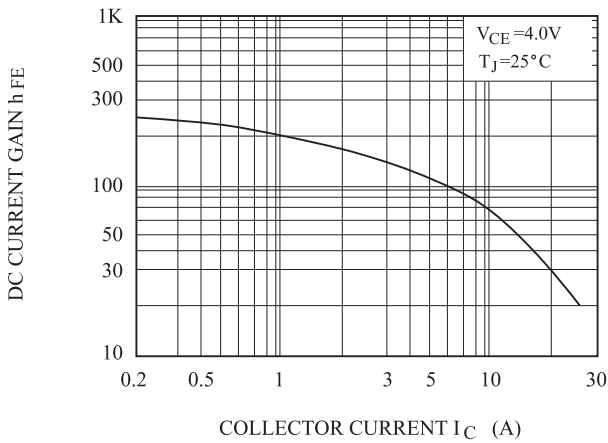
SWITCHING CHARACTERISTICS



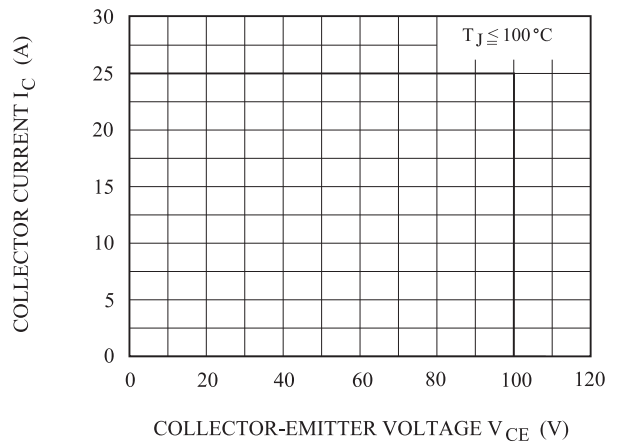
SWITCHING CHARACTERISTICS



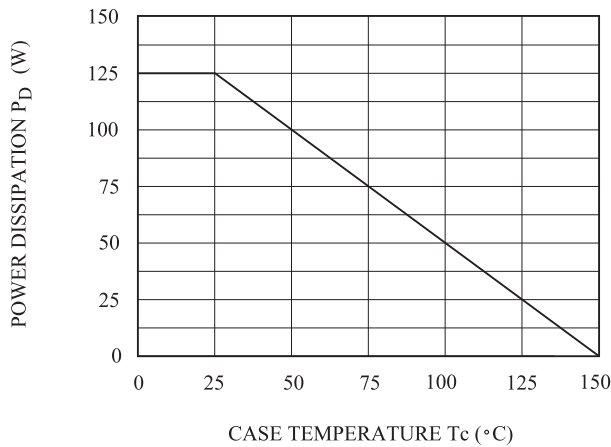
$h_{FE} - I_C$



REVERSE BIAS SAFE OPERATING AREA



$P_D - T_c$



FORWARD BIAS SAFE OPERATING AREA

