

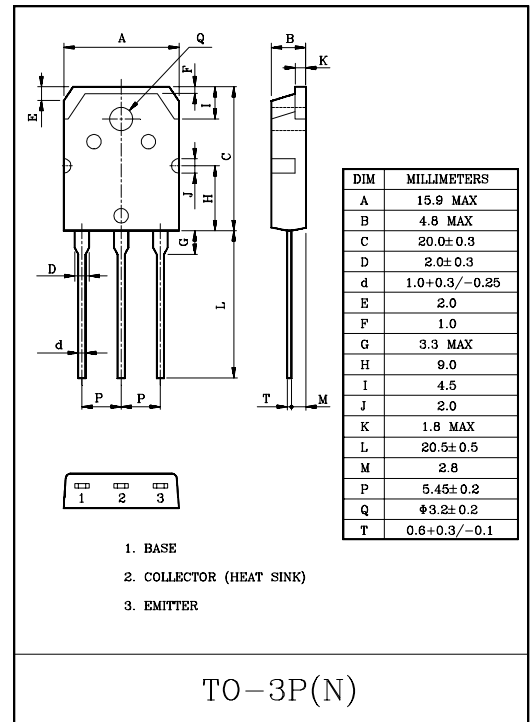
HIGH POWER AMPLIFIER  
DARLINGTON TRANSISTOR.

### FEATURES

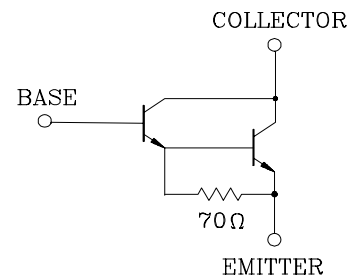
- Complementary to KTB2510.
- Recommended for 60W Audio Amplifier Output Stage.

### MAXIMUM RATINGS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL    | RATING  | UNIT |
|--------------------------------------|-----------|---------|------|
| Collector-Base Voltage               | $V_{CBO}$ | 160     | V    |
| Collector-Emitter Voltage            | $V_{CEO}$ | 150     | V    |
| Emitter-Base Voltage                 | $V_{EBO}$ | 5       | V    |
| Collector Current                    | $I_C$     | 10      | A    |
| Base Current                         | $I_B$     | 1       | A    |
| Collector Power Dissipation (Tc=25℃) | $P_C$     | 100     | W    |
| Junction Temperature                 | $T_j$     | 150     | ℃    |
| Storage Temperature Range            | $T_{stg}$ | -55~150 | ℃    |

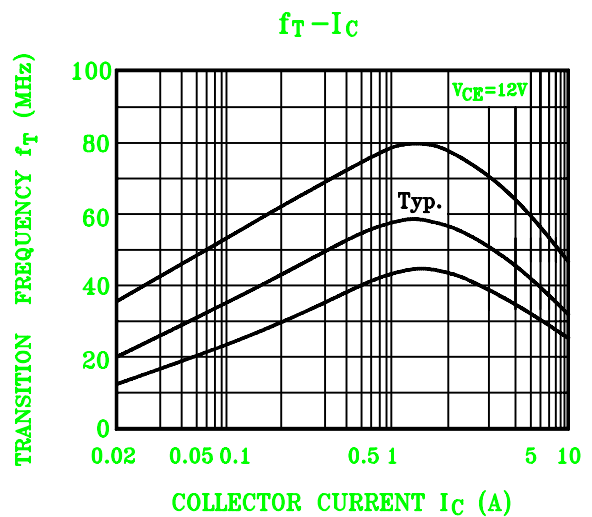
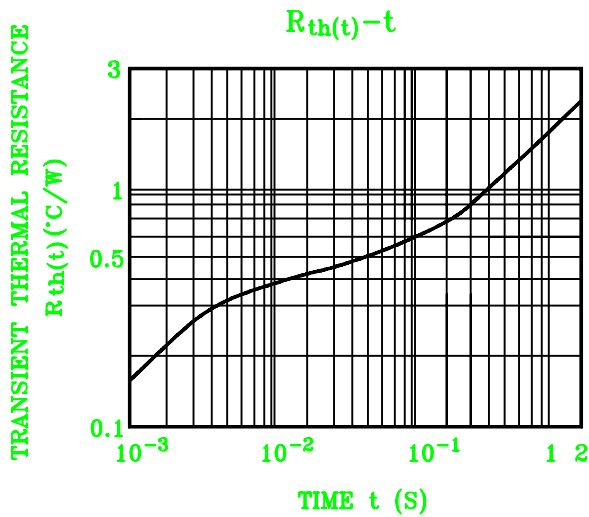
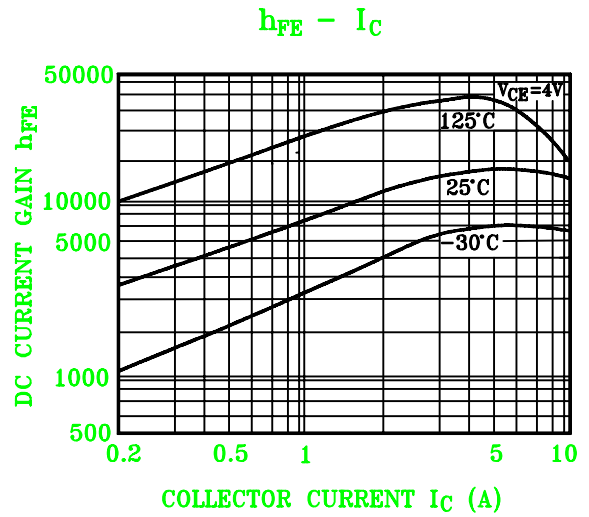
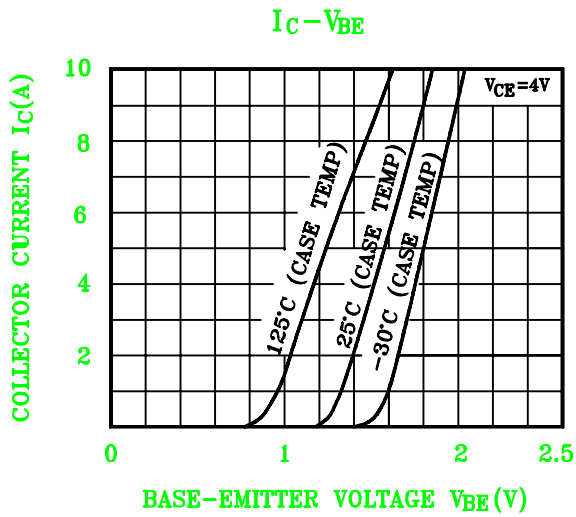
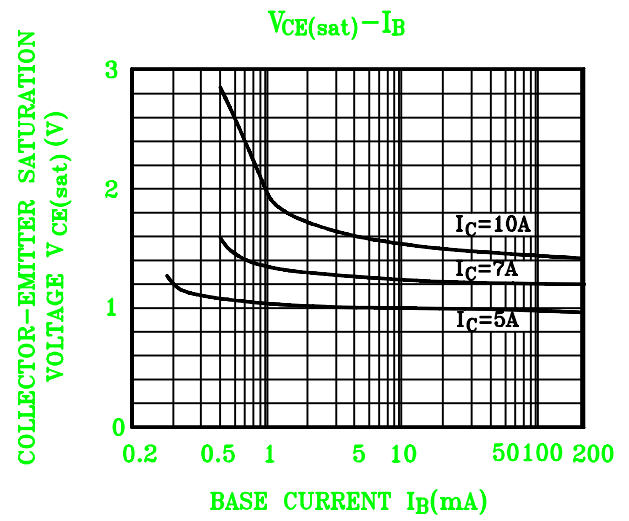
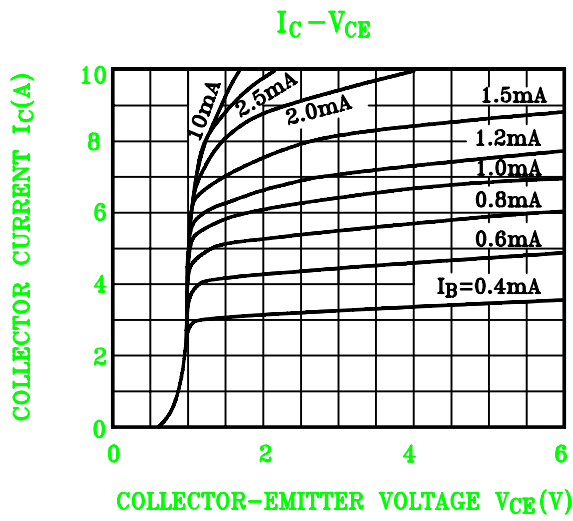


### EQUIVALENT CIRCUIT



### ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION       | MIN. | TYP. | MAX. | UNIT    |
|--------------------------------------|---------------|----------------------|------|------|------|---------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB}=160V$        | -    | -    | 100  | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB}=5V$          | -    | -    | 100  | $\mu A$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C=30mA$           | 150  | -    | -    | V       |
| DC Current Gain                      | $h_{FE}$      | $V_{CE}=4V, I_C=7A$  | 5000 | -    | -    |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=7A, I_B=7mA$    | -    | -    | 2.5  | V       |
| Base-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=7A, I_B=7mA$    | -    | -    | 3.0  | V       |
| Transition Frequency                 | $f_T$         | $V_{CE}=12V, I_C=2A$ | -    | 50   | -    | MHz     |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB}=10V, f=1MHz$ | -    | 230  | -    | pF      |



# KTD1510

