

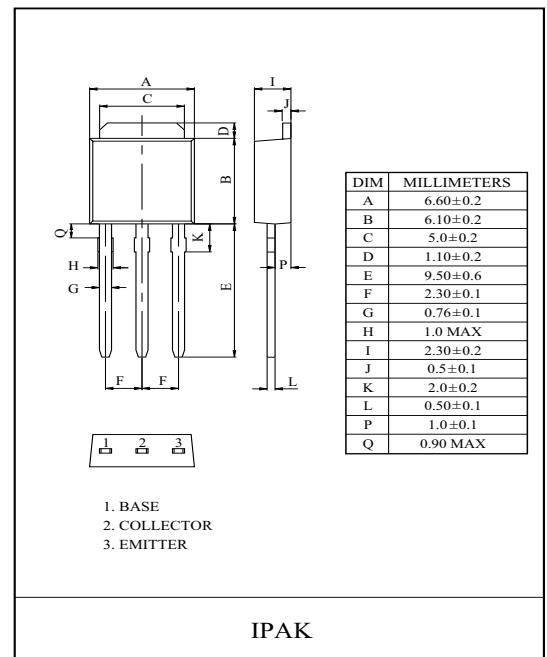
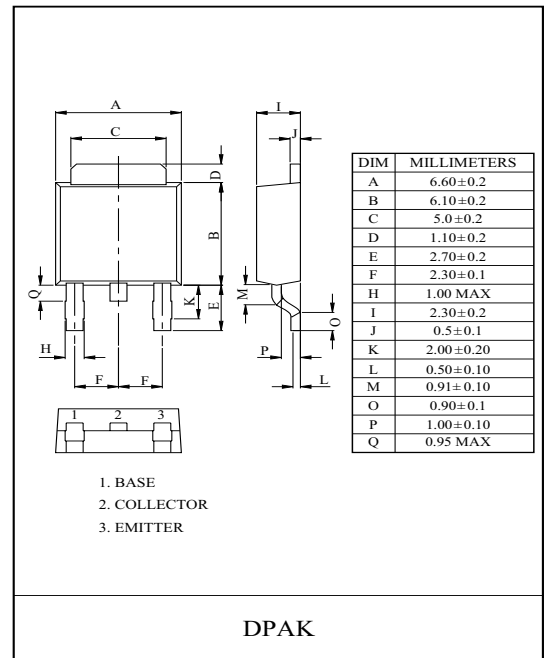
HIGH VOLTAGE APPLICATION.

#### FEATURES

- High Transition Frequency :  $f_T=100\text{MHz(Typ.)}$ .
- Complementary to KTA1225D/L.

#### MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC                 |         | SYMBOL    | RATING    | UNIT |
|--------------------------------|---------|-----------|-----------|------|
| Collector-Base Voltage         |         | $V_{CBO}$ | 160       | V    |
| Collector-Emitter Voltage      |         | $V_{CEO}$ | 160       | V    |
| Emitter-Base Voltage           |         | $V_{EBO}$ | 5         | V    |
| Collector Current              |         | $I_C$     | 1.5       | A    |
| Base Current                   |         | $I_B$     | 1.0       | A    |
| Collector Power<br>Dissipation | Ta=25°C | $P_C$     | 1.0       | W    |
|                                | Tc=25°C |           | 10        |      |
| Junction Temperature           |         | $T_j$     | 150       | °C   |
| Storage Temperature Range      |         | $T_{stg}$ | -55 ~ 150 | °C   |

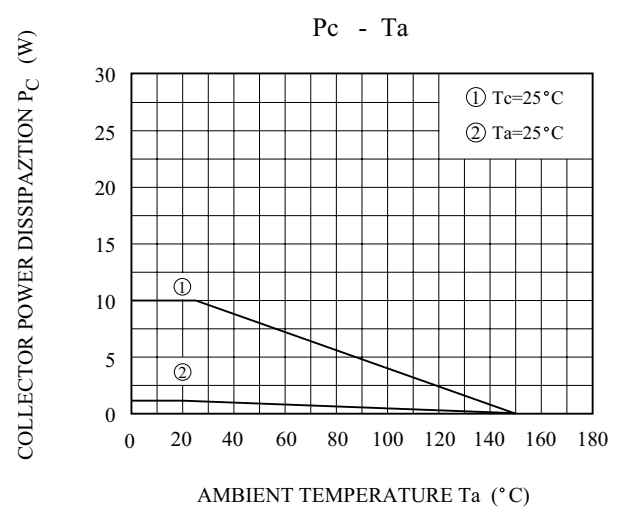
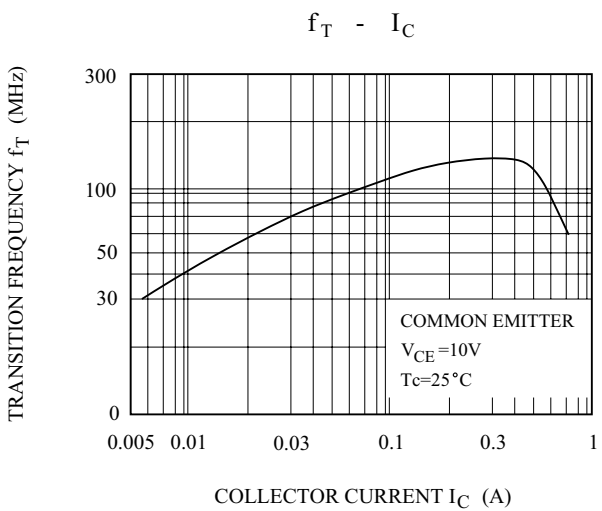
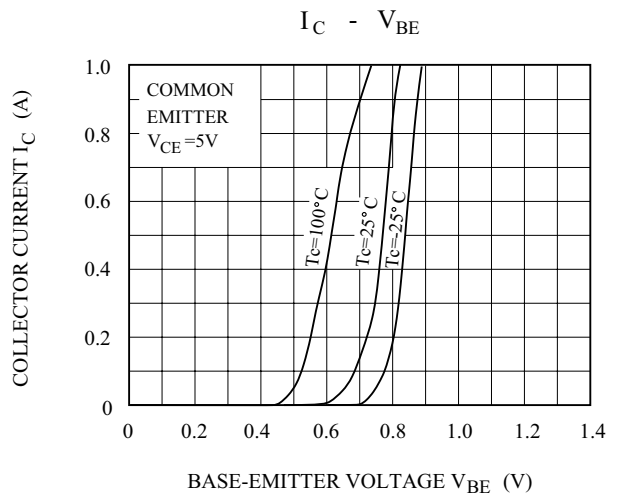
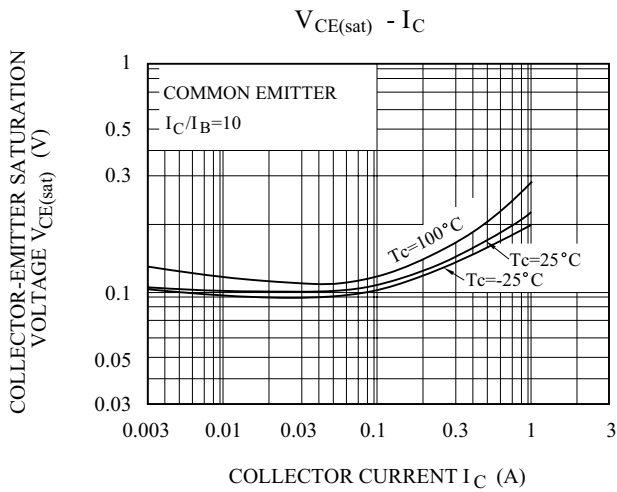
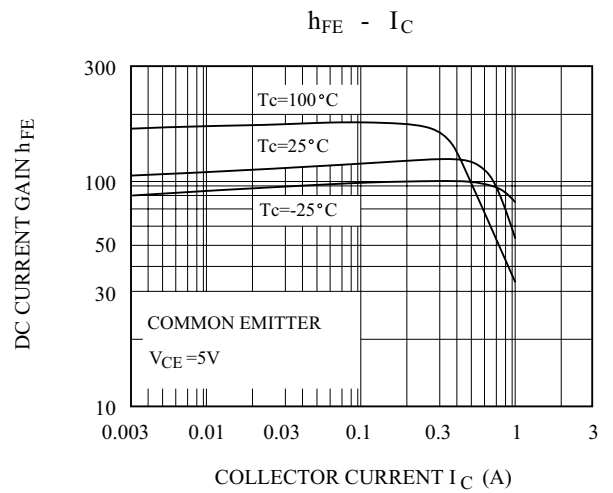
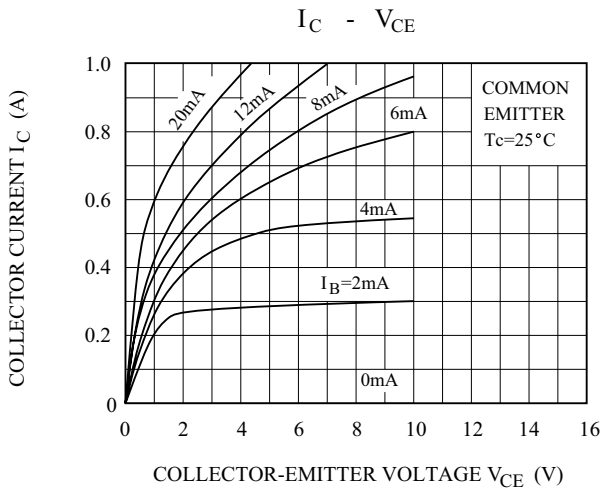


#### ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC                       | SYMBOL                | TEST CONDITION                            | MIN. | TYP. | MAX. | UNIT          |
|--------------------------------------|-----------------------|---|------|------|------|---------------|
| Collector Cut-off Current            | $I_{CBO}$             | $V_{CB}=160\text{V}, I_E=0$               | -    | -    | 1.0  | $\mu\text{A}$ |
| Emitter Cut-off Current              | $I_{EBO}$             | $V_{EB}=5\text{V}, I_C=0$                 | -    | -    | 1.0  | $\mu\text{A}$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$         | $I_C=10\text{mA}, I_B=0$                  | 160  | -    | -    | V             |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$         | $I_E=1\text{mA}, I_C=0$                   | 5.0  | -    | -    | V             |
| DC Current Gain                      | $h_{FE}(\text{Note})$ | $V_{CE}=5\text{V}, I_C=100\text{mA}$      | 70   | -    | 240  |               |
| Collector-Emitter Saturation Voltage | $V_{CE(\text{sat})}$  | $I_C=500\text{mA}, I_B=50\text{mA}$       | -    | -    | 1.5  | V             |
| Base-Emitter Voltage                 | $V_{BE}$              | $V_{CE}=5\text{V}, I_C=500\text{mA}$      | -    | -    | 1.0  | V             |
| Transition Frequency                 | $f_T$                 | $V_{CE}=10\text{V}, I_C=100\text{mA}$     | -    | 100  | -    | MHz           |
| Collector Output Capacitance         | $C_{ob}$              | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | -    | 25   | -    | pF            |

Note :  $h_{FE}$  Classification O:70~140, Y:120~240

# KTC2983D/L



# KTC2983D/L

SAFE OPERATING AREA

