

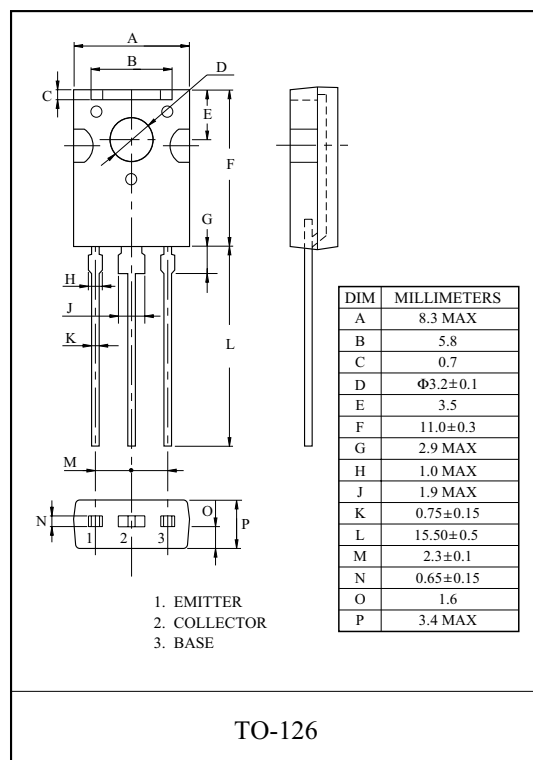
HIGH-DEFINITION CRT DISPLAY,  
VIDEO OUTPUT APPLICATIONS.

## FEATURES

- High breakdown voltage :  $V_{CEO} \geq 300V$ .
- Small reverse transfer capacitance and excellent high frequency characteristic.  
:  $C_{re}=1.8pF$  ( $V_{CB}=30V$ ,  $f=1MHz$ )
- Complementary KTA1381.

## MAXIMUM RATING (Ta=25℃)

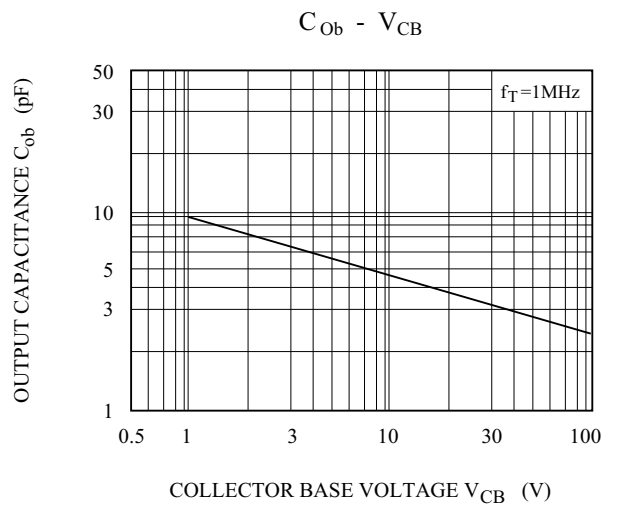
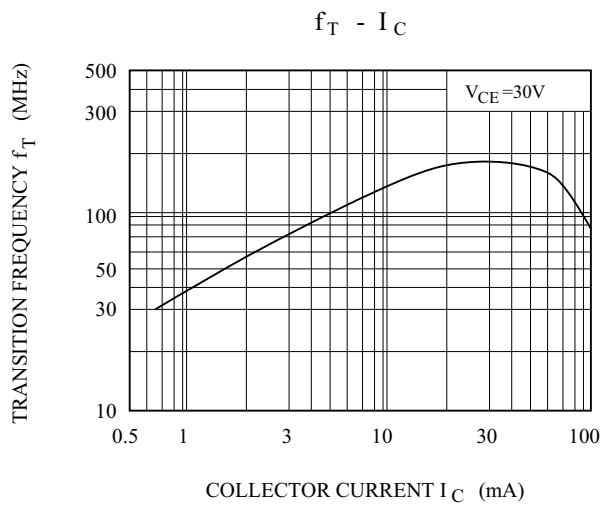
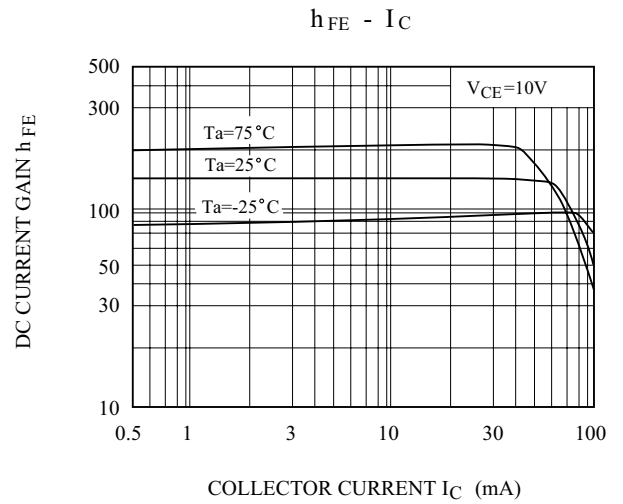
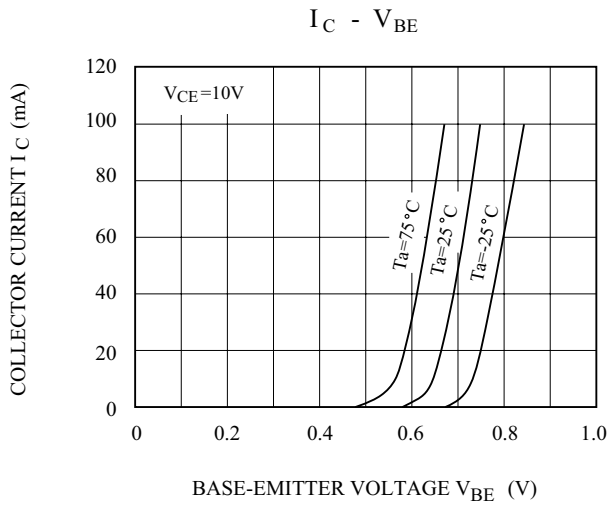
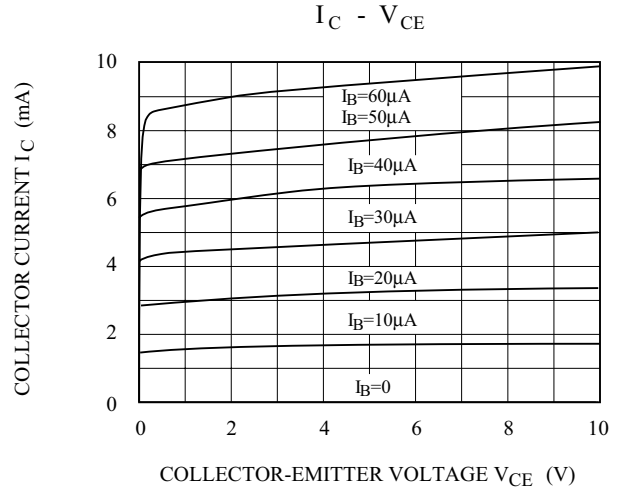
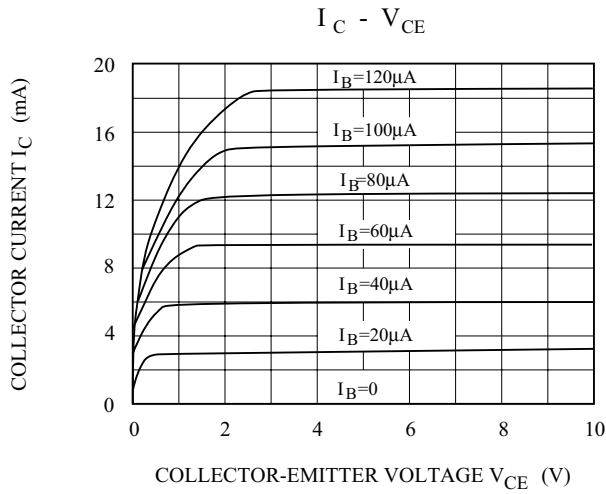
| CHARACTERISTIC              |        | SYMBOL    | RATING    | UNIT |
|-----------------------------|--------|-----------|-----------|------|
| Collector-Base Voltage      |        | $V_{CBO}$ | 300       | V    |
| Collector-Emitter Voltage   |        | $V_{CEO}$ | 300       | V    |
| Emitter-Base Voltage        |        | $V_{EBO}$ | 5         | V    |
| Collector Current           | DC     | $I_C$     | 100       | mA   |
|                             | Pulse  | $I_{CP}$  | 200       |      |
| Collector Power Dissipation | Ta=25℃ | $P_C$     | 1.5       | W    |
|                             | Tc=25℃ |           | 7         |      |
| Junction Temperature        |        | $T_j$     | 150       | ℃    |
| Storage Temperature Range   |        | $T_{stg}$ | -55 ~ 150 | ℃    |



## ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL          | TEST CONDITION                    | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------|-----------------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$       | $V_{CB}=200V$ , $I_E=0$           | -    | -    | 0.1  | μA   |
| Emitter Cut-off Current              | $I_{EBO}$       | $V_{EB}=4V$ , $I_C=0$             | -    | -    | 0.1  | μA   |
| DC Current Gain                      | $h_{FE}$ (Note) | $V_{CE}=10V$ , $I_C=10mA$         | 60   | -    | 200  |      |
| Transition Frequency                 | $f_T$           | $V_{CE}=30V$ , $I_C=10mA$         | -    | 150  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$        | $V_{CB}=30V$ , $I_E=0$ , $f=1MHz$ | -    | 2.6  | -    | pF   |
| Reverse Transfer Capacitance         | $C_{re}$        | $V_{CB}=30V$ , $I_E=0$ , $f=1MHz$ | -    | 1.8  | -    | pF   |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$   | $I_C=20mA$ , $I_B=2mA$            | -    | -    | 0.6  | V    |
| Base-Emitter Saturation Voltage      | $V_{BE(sat)}$   | $I_C=20mA$ , $I_B=2mA$            | -    | -    | 1.0  | V    |
| Collector-Base Breakdown Voltage     | $V_{(BR)CBO}$   | $I_C=10\mu A$ , $I_E=0$           | 300  | -    | -    | V    |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$   | $I_C=1mA$ , $I_B=0$               | 300  | -    | -    | V    |
| Base-Emitter Breakdown Voltage       | $V_{(BR)EBO}$   | $I_E=10\mu A$ , $I_C=0$           | 5    | -    | -    | V    |

Note :  $h_{FE}$  Classification O:60 ~ 120, Y:100 ~ 200



# KTC3503

