

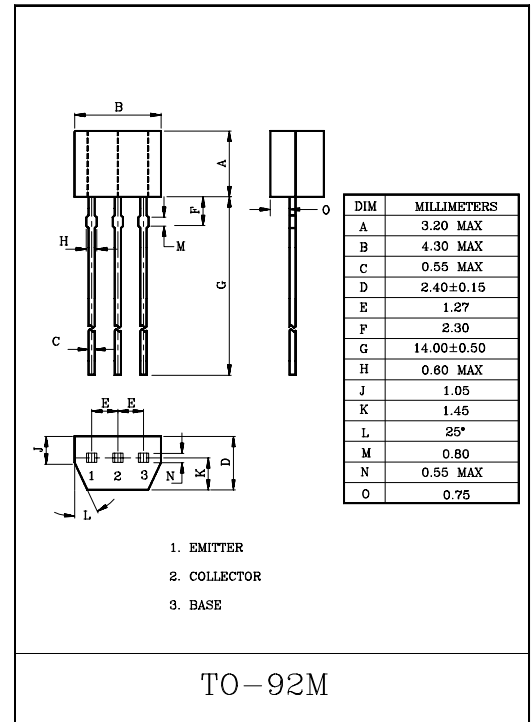
GENERAL PURPOSE APPLICATION  
SWITCHING APPLICATION.

### FEATURES

- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(Typ.)$ .
- Low Noise :  $NF=1dB(Typ.)$ ,  $10dB(Max.)$ .
- Complementary to KTC3199.

### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ )

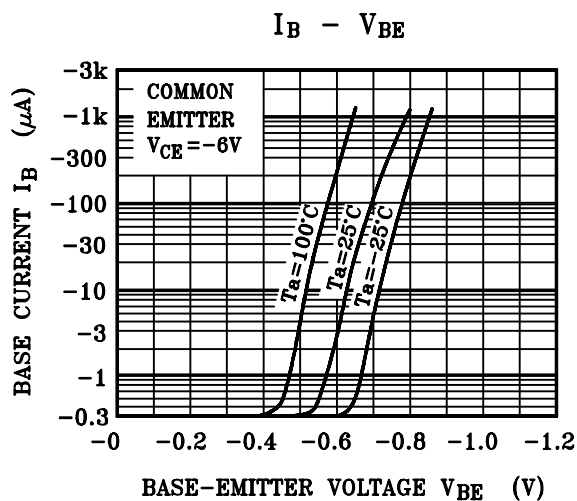
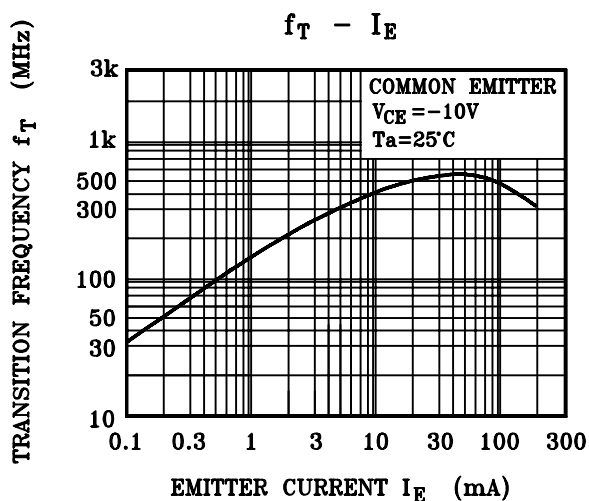
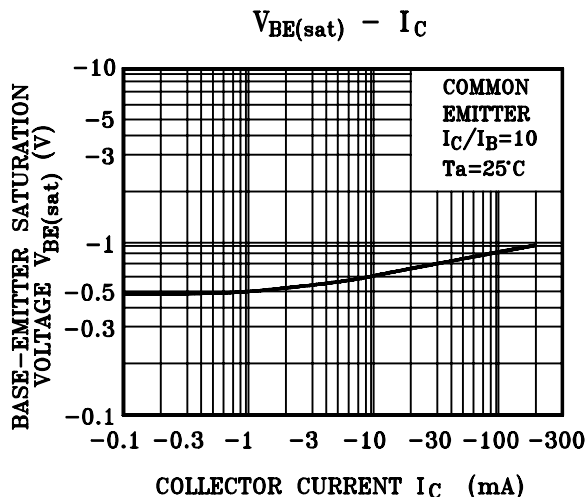
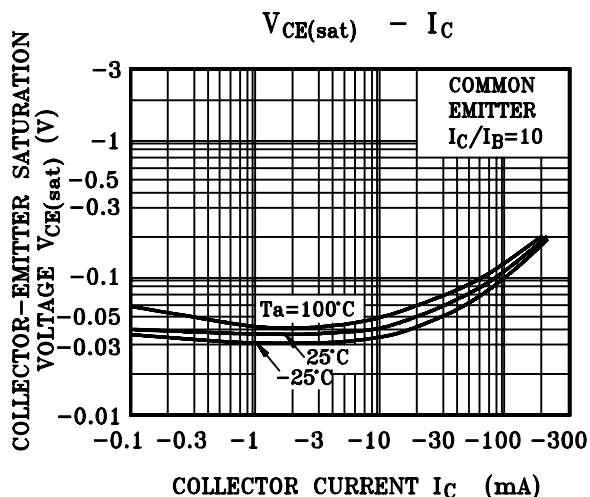
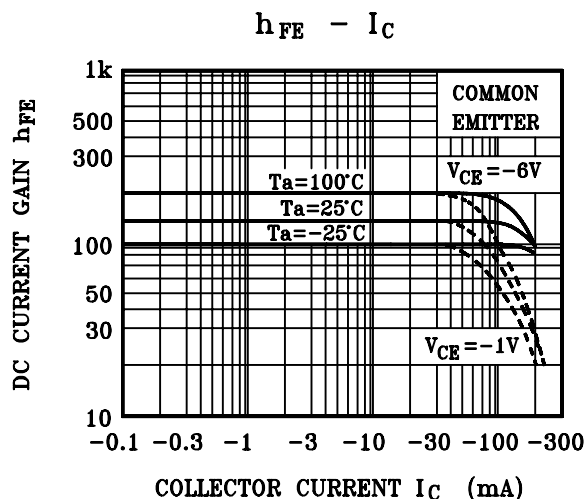
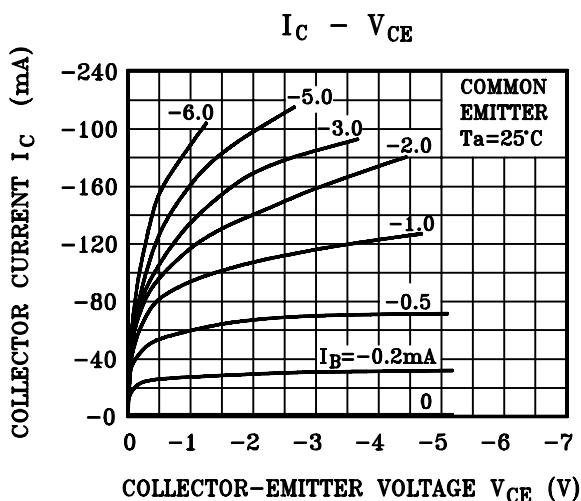
| CHARACTERISTIC              | SYMBOL    | RATING  | UNIT        |
|-----------------------------|-----------|---------|-------------|
| Collector-Base Voltage      | $V_{CBO}$ | -50     | V           |
| Collector-Emitter Voltage   | $V_{CEO}$ | -50     | V           |
| Emitter-Base Voltage        | $V_{EBO}$ | -5      | V           |
| Collector Current           | $I_C$     | -150    | mA          |
| Emitter Current             | $I_E$     | 150     | mA          |
| Collector Power Dissipation | $P_C$     | 400     | mW          |
| Junction Temperature        | $T_j$     | 150     | $^{\circ}C$ |
| Storage Temperature Range   | $T_{stg}$ | -55~150 | $^{\circ}C$ |



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

| CHARACTERISTIC                       | SYMBOL         | TEST CONDITION                                  | MIN. | TYP. | MAX. | UNIT    |
|--------------------------------------|----------------|---|------|------|------|---------|
| Collector Cut-off Current            | $I_{CBO}$      | $V_{CB}=-50V, I_E=0$                            | -    | -    | -0.1 | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$      | $V_{EB}=-5V, I_C=0$                             | -    | -    | -0.1 | $\mu A$ |
| DC Current Gain                      | $h_{FE}(Note)$ | $V_{CE}=-6V, I_C=-2mA$                          | 70   | -    | 400  |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$  | $I_C=-100mA, I_B=-10mA$                         | -    | -0.1 | -0.3 | V       |
| Transition Frequency                 | $f_T$          | $V_{CE}=-10V, I_C=-1mA$                         | 80   | -    | -    | MHz     |
| Collector Output Capacitance         | $C_{ob}$       | $V_{CB}=-10V, I_E=0, f=1MHz$                    | -    | 4.0  | 7.0  | pF      |
| Noise Figure                         | NF             | $V_{CE}=-6V, I_C=-0.1mA, f=1kHz, R_g=10k\Omega$ | -    | 1.0  | 10   | dB      |

Note :  $h_{FE}$  Classification O:70~140 , Y:120~240 , GR:200~400



# KTA1267

