

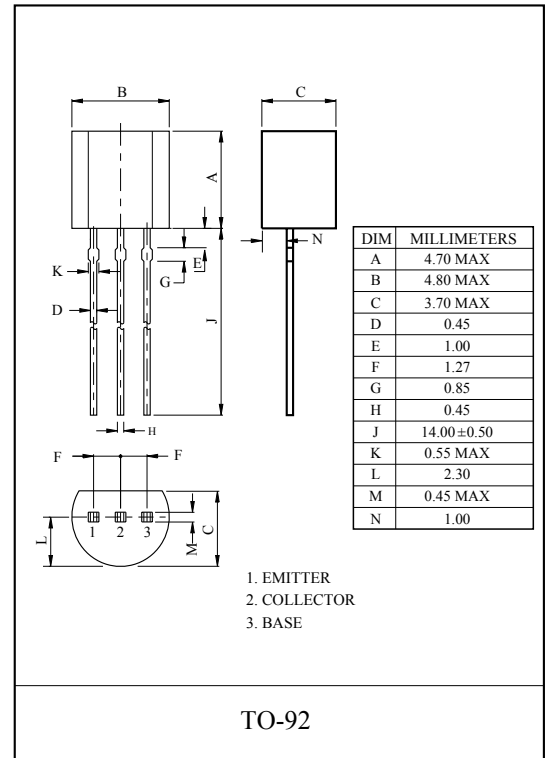
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Excellent h_{FE} Linearity
 : $h_{FE(2)}=100(\text{Typ.})$ at $V_{CE}=6V, I_C=150mA$
 : $h_{FE(I_C=0.1mA)}/h_{FE(I_C=2mA)}=0.95(\text{Typ.})$.
- Low Noise : $NF=1dB(\text{Typ.})$. at $f=1kHz$.
- Complementary to KTA1266.

MAXIMUM RATING ($T_a=25^\circ C$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|-----------|------------|
| Collector-Base Voltage | V_{CBO} | 60 | V |
| Collector-Emitter Voltage | V_{CEO} | 50 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 150 | mA |
| Base Current | I_B | 50 | mA |
| Collector Power Dissipation | P_C | 625 | mW |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | $^\circ C$ |

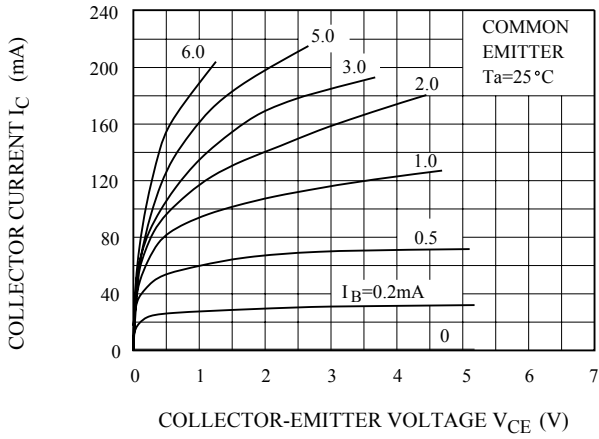


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

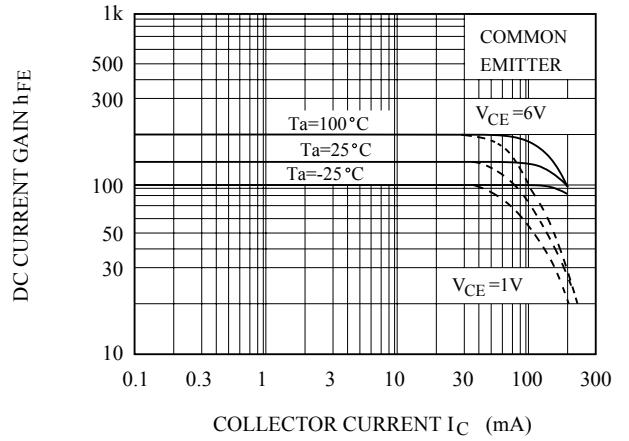
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|---|------|------|------|----------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=60V, I_E=0$ | - | - | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 0.1 | μA |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE}=6V, I_C=2mA$ | 70 | - | 700 | |
| | $h_{FE(2)}$ | $V_{CE}=6V, I_C=150mA$ | 25 | 100 | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | 0.1 | 0.25 | V |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | - | 1.0 | V |
| Transition Frequency | f_T | $V_{CE}=10V, I_C=1mA$ | 80 | - | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 2.0 | 3.5 | pF |
| Base Intrinsic Resistance | $r_{bb'}$ | $V_{CB}=10V, I_E=1mA, f=30MHz$ | - | 50 | - | Ω |
| Noise Figure | NF | $V_{CE}=6V, I_C=0.1mA, R_g=10k\Omega, f=1kHz$ | - | 1.0 | 10 | dB |

Note : $h_{FE(1)}$ Classification O:70 ~ 140, Y:120 ~ 240, GR:200 ~ 400, BL:300~700

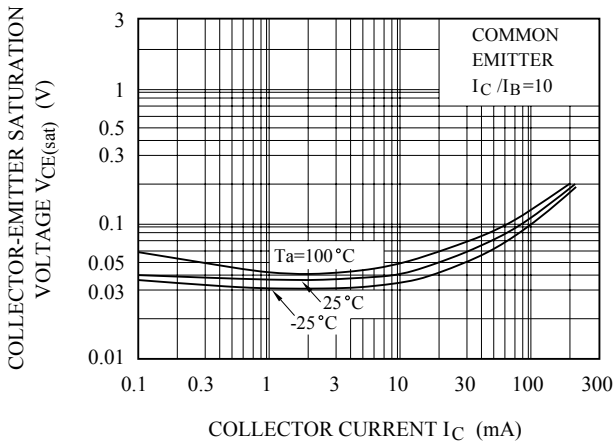
$I_C - V_{CE}$



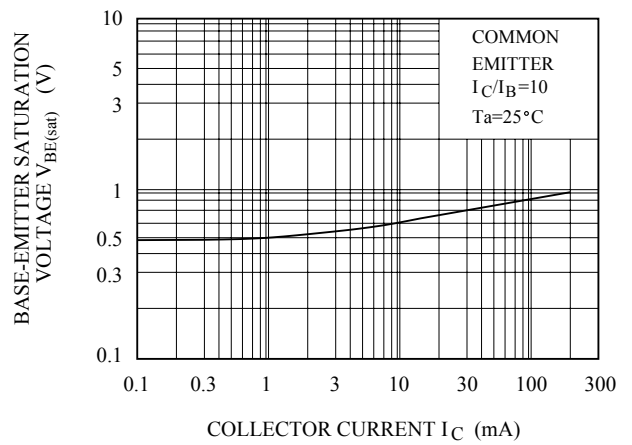
$h_{FE} - I_C$



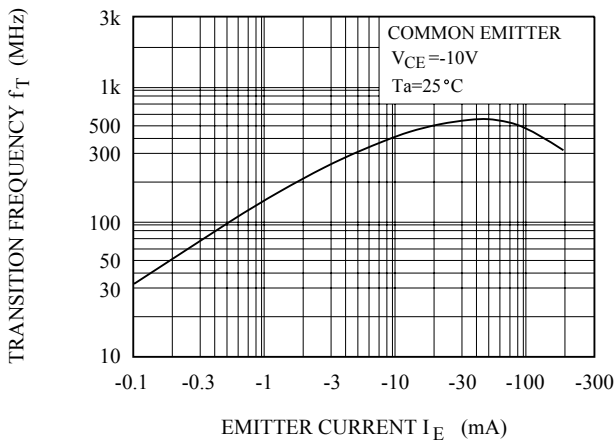
$V_{CE(sat)} - I_C$



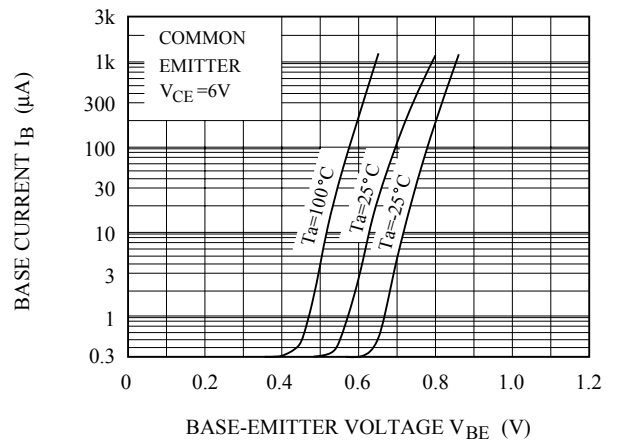
$V_{BE(sat)} - I_C$



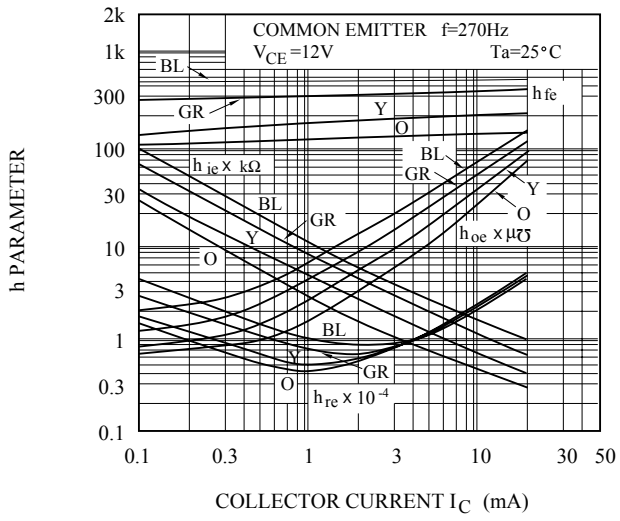
$f_T - I_E$



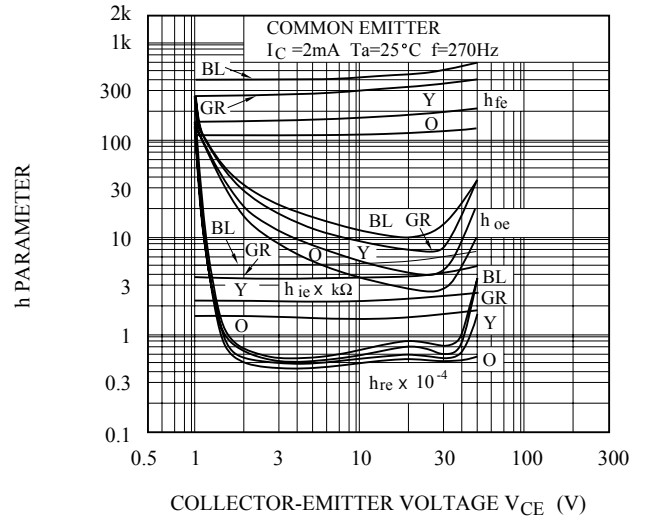
$I_B - V_{BE}$



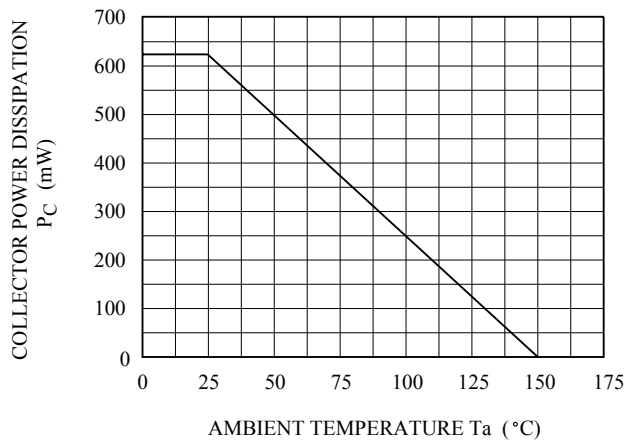
h PARAMETER - I_C



h PARAMETER - V_{CE}



$P_c - T_a$



This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.