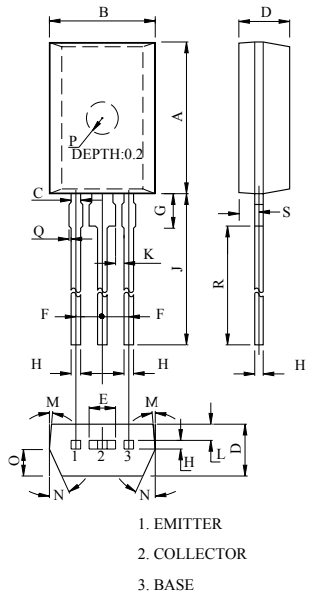
STROBO FLASH APPLICATION.
HIGH CURRENT APLICATION.

FEATURES

· High DC Current Gain and Excellent $h_{FE}$ Linearity
: $h_{FE}(1)$=140～600 ($V_{CE}$=1V, $I_C$=0.5A)
: $h_{FE}(2)$=70(Min.), 200(Typ.) ($V_{CE}$=1V, $I_C$=2A).

· Low Saturation Voltage
: $V_{CE(sat)}$=0.5V(Max.) ($I_C$=2A, $I_B$=50mA).




| DIM | MILLIMETERS |
|---|---|
| A | 7.20 MAX |
| B | 5.20 MAX |
| C | 0.60 MAX |
| D | 2.50 MAX |
| E | 1.15 MAX |
| F | 1.27 |
| G | 1.70 MAX |
| H | 0.55 MAX |
| J | 14.00±0.50 |
| K | 0.35 MIN |
| L | 0.75±0.10 |
| M | 4° |
| N | 25° |
| O | 1.25 |
| P | Φ1.50 |
| Q | 0.10 MAX |
| R | 12.50±0.50 |
| S | 1.00 |

TO-92L

MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|---|---|---|---|---|
| Collector-Base Voltage | | $V_{CBO}$ | 30 | V |
| Collector Emitter Voltage | | $V_{CES}$ | 30 | V |
| | | $V_{CEO}$ | 10 | |
| Emitter Base Voltage | | $V_{EBO}$ | 6 | V |
| Collector Current | DC | $I_C$ | 2 | A |
| | Pulse (Note1) | $I_{CP}$ | 5 | |
| Emitter Current | | $I_E$ | -2 | A |
| Collector Power Dissipation | | $P_C$ | 1 | W |
| Junction Temperature | | $T_j$ | 150 | ℃ |
| Storage Temperature Range | | $T_{stg}$ | -55～150 | ℃ |

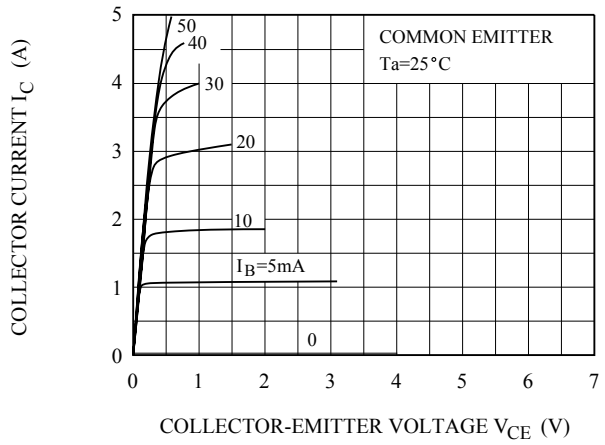
Note 1 : Pulse Width≦10ms, Duty Cycle≦30%

ELECTRICAL CHARACTERISTICS (Ta=25℃)

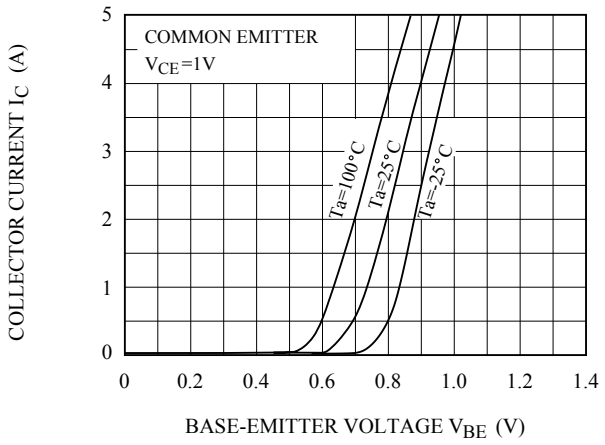
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| Collector Cut-off Current | $I_{CBO}$ | $V_{CB}$=30V, $I_E$=0 | - | - | 100 | nA |
| Emitter Cut-off Current | $I_{EBO}$ | $V_{EB}$=6V, $I_C$=0 | - | - | 100 | nA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C$=10mA, $I_B$=0 | 10 | - | - | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E$=-1mA, $I_C$=0 | 6 | - | - | V |
| DC Current Gain | $h_{FE}(1)$ (Note2) | $V_{CE}$=1V, $I_C$=0.5A | 140 | - | 600 | |
| | $h_{FE}(2)$ | $V_{CE}$=1V, $I_C$=2A | 70 | 200 | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C$=2A, $I_B$=50mA | - | 0.2 | 0.5 | V |
| Base-Emitter Voltage | $V_{BE}$ | $V_{CE}$=1V, $I_C$=2A | - | 0.86 | 1.5 | V |
| Transition Frequency | $f_T$ | $V_{CE}$=1V, $I_C$=0.5A | - | 150 | - | MHz |
| Collector Output Capacitance | $C_{ob}$ | $V_{CB}$=10V, $I_E$=0, f=1MHz | - | 27 | - | pF |

Note 2 : $h_{FE}(1)$ Classification A:140～240, B:200～330, C:300～450, D:420～600

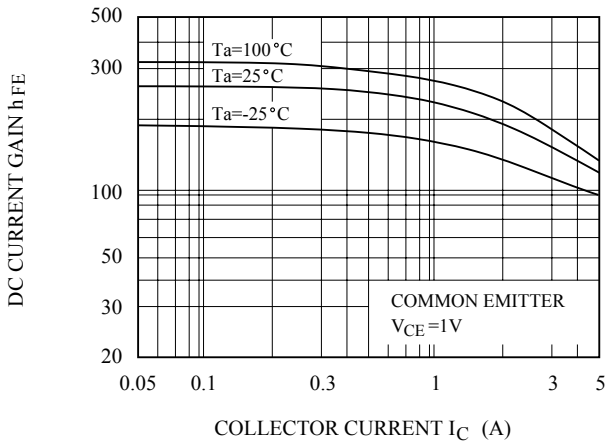
$I_C$ - $V_{CE}$



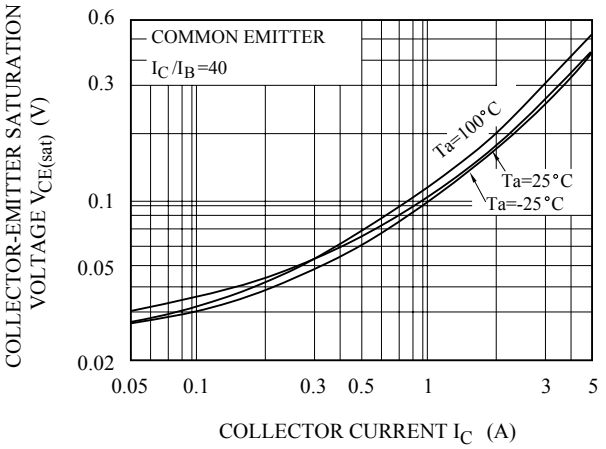

$I_C$ - $V_{BE}$



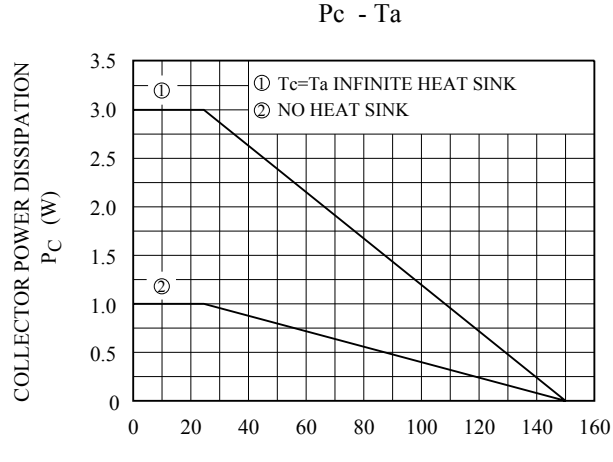

$h_{FE}$ - $I_C$




$V_{CE(sat)}$ - $I_C$




Pc - Ta




SAFE OPERATING AREA