

STROBO FLASH APPLICATION.
HIGH CURRENT APPLICATION.

FEATURES

- High DC Current Gain and Excellent h_{FE} Linearity
 - : $h_{FE}(1)=140\sim600$ ($V_{CE}=1V, I_C=0.5A$)
 - : $h_{FE}(2)=70(\text{Min.}), 200(\text{Typ.})$ ($V_{CE}=1V, I_C=2A$).
- Low Saturation Voltage
 - : $V_{CE(sat)}=0.5V(\text{Max.})$ ($I_C=2A, I_B=50mA$).

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

| 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 | |
| Base Current | | I_B | 2 | A |
| Collector Power Dissipation | | P_C | 1 | W |
| Junction Temperature | | T_j | 150 | $^\circ C$ |
| Storage Temperature Range | | T_{stg} | -55~150 | $^\circ C$ |

Note 1 : Pulse Width $\leq 10ms$, Duty Cycle $\leq 30\%$

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

| 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 | $h_{FE}(1)$ (Note 2) | $V_{CE}=1V, I_C=0.5A$ | 140 | - | 600 | |
| | | $V_{CE}=1V, I_C=2A$ | 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



