

STROBO FLASH APPLICATION.
HIGH CURRENT APPLICATION.

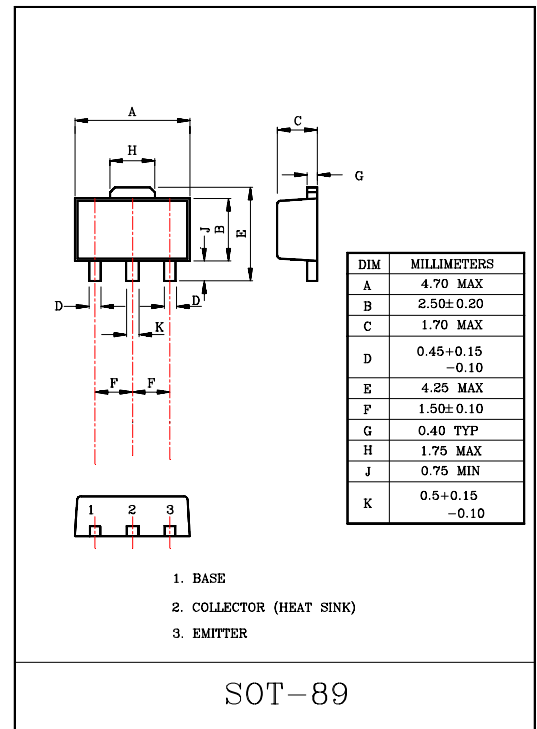
FEATURES

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

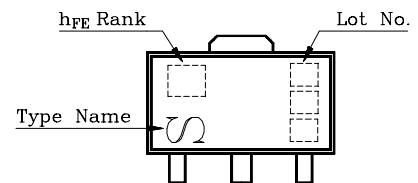
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

| 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 (Note 1) | I_{CP} | 4 | |
| Base Current | DC | I_B | 0.4 | A |
| | Pulse (Note 1) | I_{BP} | 0.8 | |
| Collector Power Dissipation | | P_C | 500 | mW |
| | | P_{C^*} | 1 | W |
| Junction Temperature | | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | | T_{stg} | -55~150 | $^\circ\text{C}$ |

Note 1 : Pulse Width $\leq 10\text{ms}$, Duty Cycle $\leq 30\%$
 P_{C^*} : KTC4377 mounted on ceramic substrate (250mm²x0.8t)



Marking



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

| 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 1) | $V_{CE}=1V, I_C=0.5A$ | 140 | - | 600 | |
| | $h_{FE}(2)$ | $V_{CE}=1V, I_C=2A$ | 70 | 140 | - | |
| 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 1 : $h_{FE}(1)$ Classification A:140~240, B:200~330, C:300~450, D:420~600

