

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

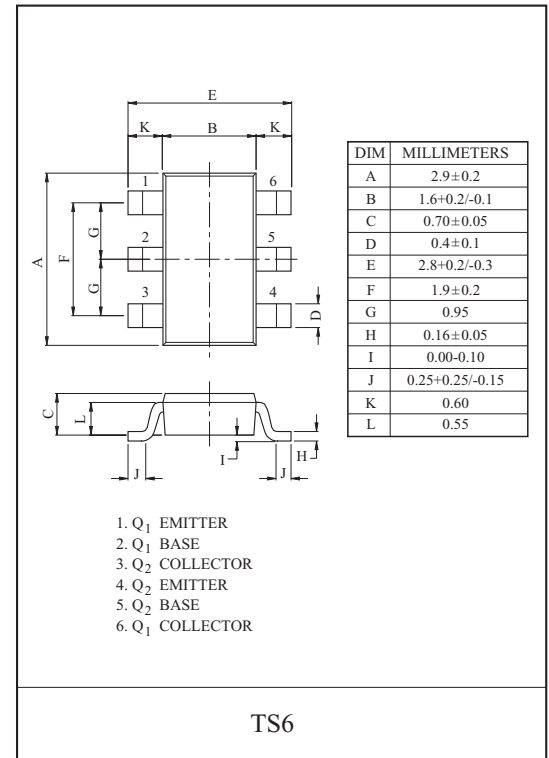
FEATURES

- Excellent h_{FE} Linearity
: $h_{FE(2)}=25(\text{Min.})$ at $V_{CE}=6V, I_C=400\text{mA}$.
- Complementary to KTA711T.

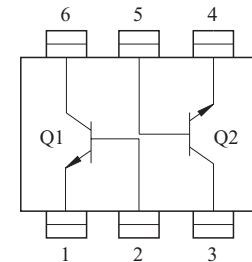
MAXIMUM RATING ($T_a=25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|-----------|------------------|
| Collector-Base Voltage | V_{CBO} | 35 | V |
| Collector-Emitter Voltage | V_{CEO} | 30 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 500 | mA |
| Emitter Current | I_E | -500 | mA |
| Collector Power Dissipation | P_C^* | 0.9 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | $^\circ\text{C}$ |

* Package mounted on a ceramic board ($600\text{mm}^2 \times 0.8\text{mm}$)



EQUIVALENT CIRCUIT (TOP VIEW)



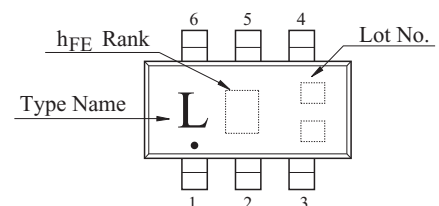
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|-------------------------------------|------|------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=35V, I_E=0$ | - | - | 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) | $V_{CE}=1V, I_C=100\text{mA}$ | 70 | - | 240 | |
| | $h_{FE(2)}$ (Note) | $V_{CE}=6V, I_C=400\text{mA}$ | 25 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$ | - | 0.1 | 0.25 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=1V, I_C=100\text{mA}$ | - | 0.8 | 1.0 | V |
| Transition Frequency | f_T | $V_{CE}=6V, I_C=20\text{mA}$ | - | 300 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=6V, I_E=0, f=1\text{MHz}$ | - | 7.0 | - | pF |

Note : $h_{FE(1)}$ Classification 0:70 ~ 140, Y:120 ~ 240

$h_{FE(2)}$ Classification 0:25Min., Y:40Min.

Marking



KTC811T

