

HIGH CURRENT APPLICATION  
CAMERA STROBO (For Electronic Flash Unit)

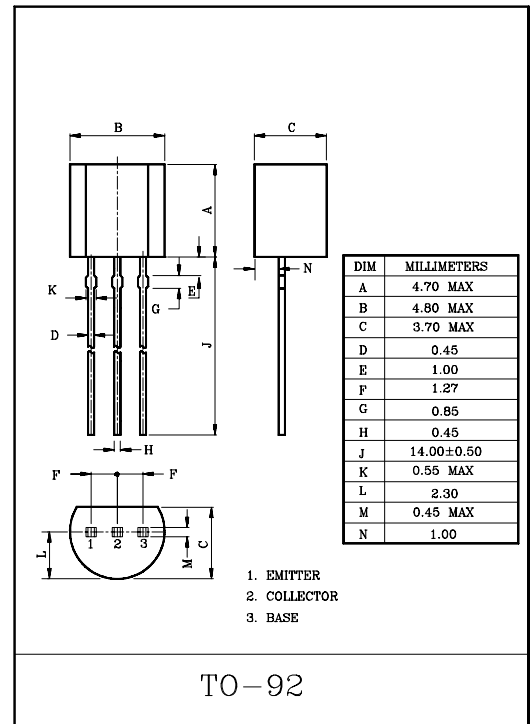
### FEATURES

- Low  $V_{CE(SAT)}$ .
- High Performance at Low Supply Voltage.

### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC              |               | SYMBOL    | RATING  | UNIT |
|-----------------------------|---------------|-----------|---------|------|
| Collector-Base Voltage      |               | $V_{CBO}$ | 40      | V    |
| Collector-Emitter Voltage   |               | $V_{CEO}$ | 20      | V    |
| Emitter-Base Voltage        |               | $V_{EBO}$ | 7       | V    |
| Collector Current           | DC            | $I_C$     | 5       | A    |
|                             | Pulse (Note1) | $I_{CP}$  | 8       |      |
| Collector Power Dissipation |               | $P_C$     | 625     | mW   |
| Junction Temperature        |               | $T_j$     | 150     | °C   |
| Storage Temperature Range   |               | $T_{stg}$ | -55~150 | °C   |

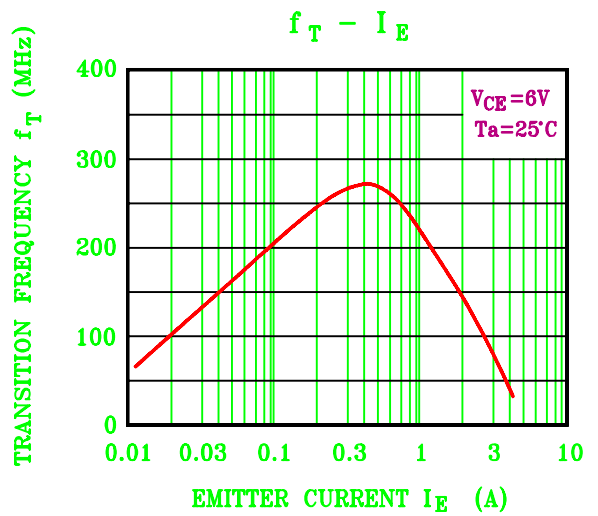
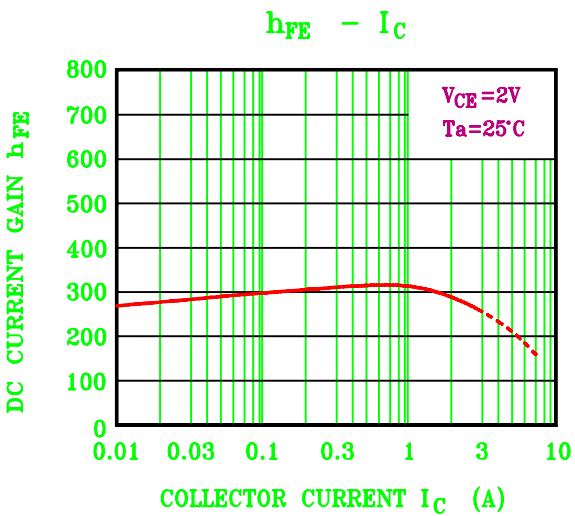
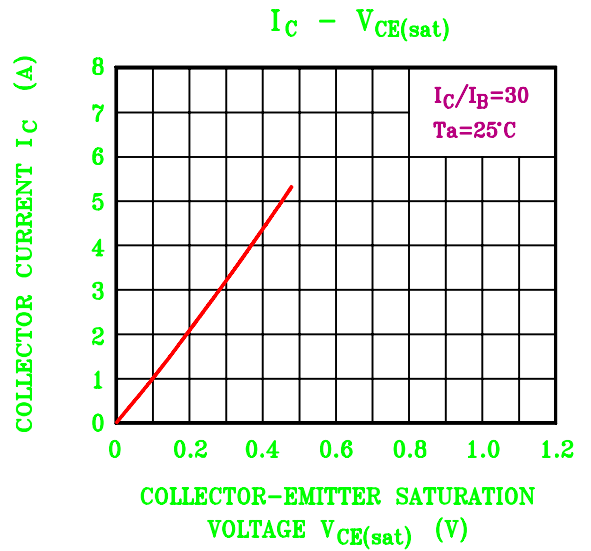
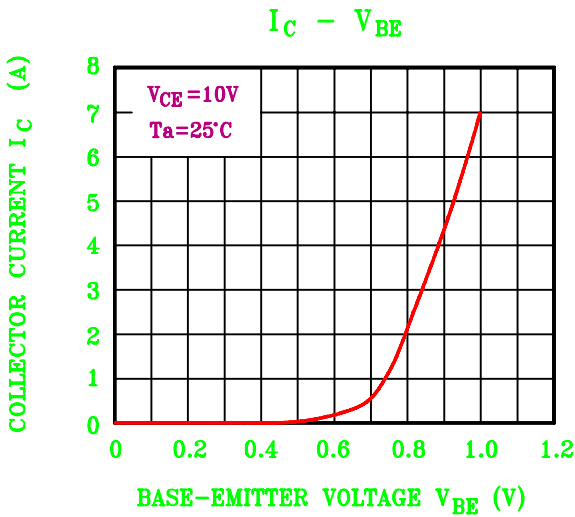
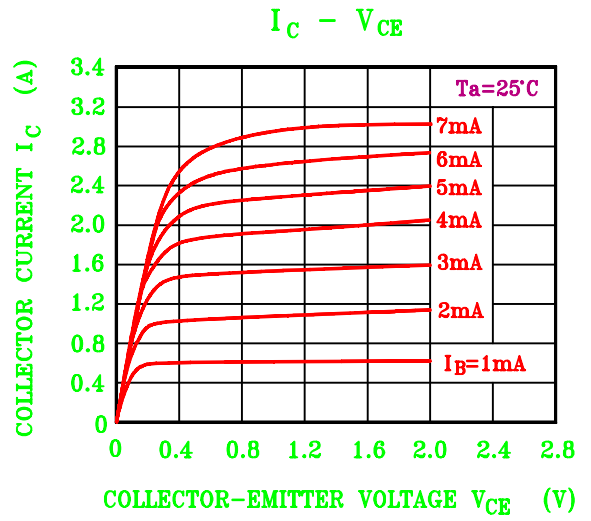
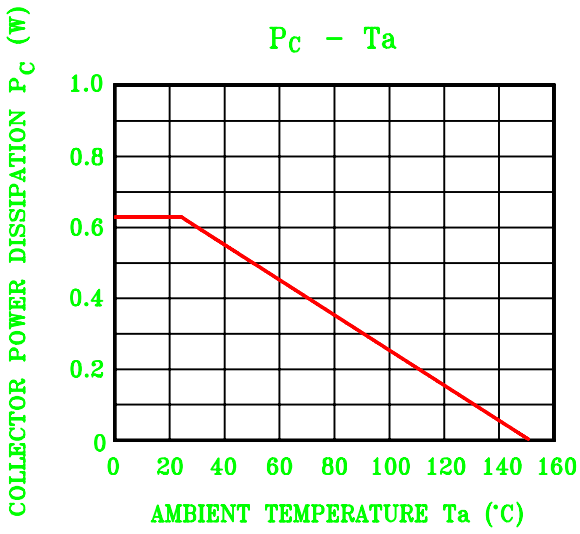
Note 1: Pulse Width  $\leq 100\text{ms}$ , Duty Cycle  $\leq 30\%$



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC                          | SYMBOL                  | TEST CONDITION                          | MIN. | TYP. | MAX. | UNIT |
|---|-------------------------|---|------|------|------|------|
| Collector Base Breakdown Voltage        | $V_{(BR)CBO}$           | $I_C=100\mu\text{A}$                    | 40   | -    | -    | V    |
| Collector Emitter Breakdown Voltage (1) | $V_{(BR)CEO}$           | $I_C=1\text{mA}$                        | 20   | -    | -    | V    |
| Emitter Base Breakdown Voltage          | $V_{(BR)EBO}$           | $I_E=10\mu\text{A}$                     | 7    | -    | -    | V    |
| Collector Cutoff Current                | $I_{CBO}$               | $V_{CB}=20\text{V}, I_E=0$              | -    | -    | 100  | nA   |
| Emitter Cutoff Current                  | $I_{EBO}$               | $V_{EB}=7\text{V}, I_C=0$               | -    | -    | 100  | nA   |
| DC Current Gain                         | $h_{FE(1)}$<br>(Note 1) | $V_{CE}=2\text{V}, I_C=0.5\text{A}$     | 120  | -    | 700  |      |
|   | $h_{FE(2)}$             | $V_{CE}=2\text{V}, I_C=2\text{A}$       | 100  | -    | -    |      |
| Collector-Emitter Saturation Voltage    | $V_{CE(sat)}$           | $I_C=3\text{A}, I_B=60\text{mA(Pulse)}$ | -    | -    | 0.4  | V    |
| Transition Frequency                    | $f_T$                   | $V_{CE}=6\text{V}, I_C=50\text{mA}$     | 20   | 100  | -    | MHz  |
| Collector Output Capacitance            | $C_{ob}$                | $V_{CB}=20\text{V}, f=1\text{MHz}$      | -    | -    | 50   | pF   |

Note 1 :  $h_{FE(1)}$  Classification O:120~240, Y:200~400, GR:350~700



# KTD1146

