



2SC5765

NPN EPITAXIAL SILICON TRANSISTOR

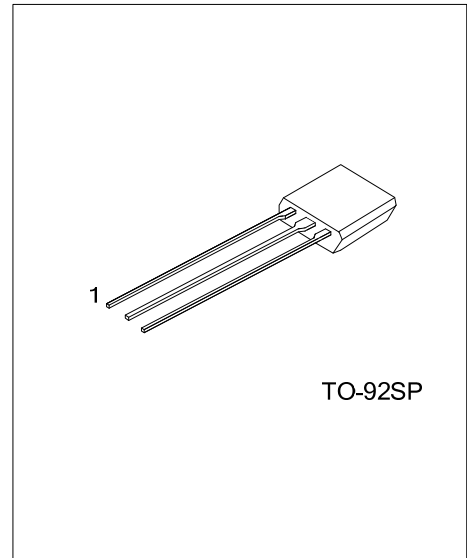
MEDIUM POWER AMPLIFIER STROBO FLASH

DESCRIPTION

medium power amplifier applications
strobo flash applications

FEATURES

* Low Saturation Voltage: $V_{CE(sat)} = 0.27 \text{ V (max.)}$,
($I_C = 3 \text{ A} / I_B = 60 \text{ mA}$)



ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | Packing |
|-----------------|----------------|---------|----------------|---|---|---------|
| Lead Free | Halogen Free | | 1 | 2 | 3 | |
| 2SC5765L-T9S-K | 2SC5765G-T9S-K | TO-92SP | E | C | B | Bulk |

Note: Pin Assignment: E: Emitter B: Base C: Collector

| | |
|--|---|
| <p>2SC5756L-T9K-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Lead Free</p> | <p>(1) K: Bulk</p> <p>(2) T9S: TO-92SP</p> <p>(3) L: Lead Free, G: Halogen Free</p> |
|--|---|

■ ABSOLUTE MAXIMUM RATING ($T_A=25^{\circ}\text{C}$)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|--------------------------------------|-----------|------------|--------------------|
| Collector-Base Voltage | V_{CBO} | 15 | V |
| Collector-Emitter Voltage | V_{CEO} | 10 | V |
| Emitter-Base Voltage | V_{EBO} | 7 | V |
| Collector Current | DC | 5 | A |
| | PLUSED | 9 | A |
| Collector Power Dissipation (Note 2) | P_C | 550 | mW |
| Junction Temperature | T_J | 150 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +150 | $^{\circ}\text{C}$ |

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

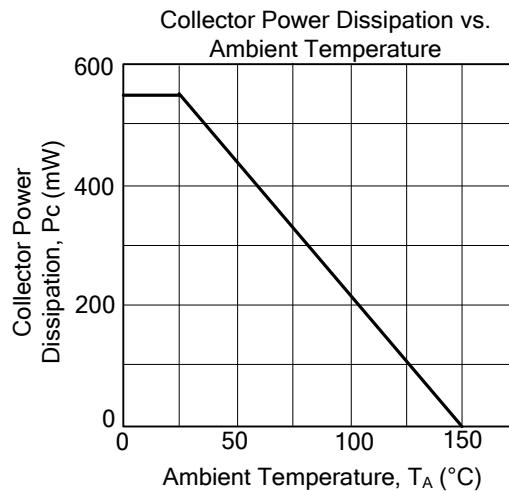
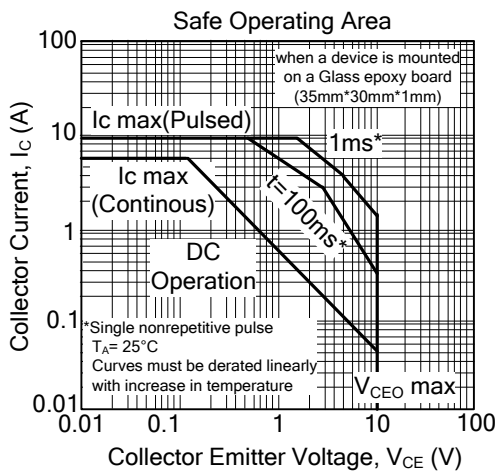
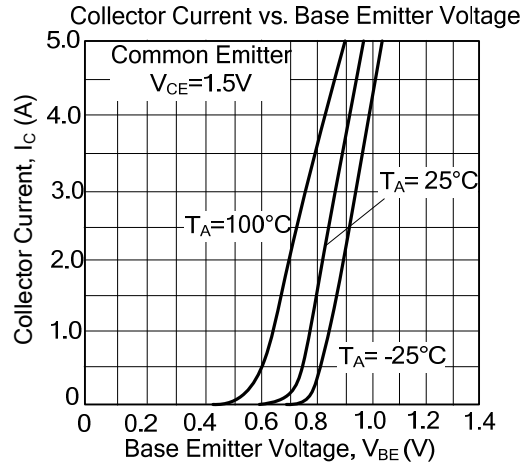
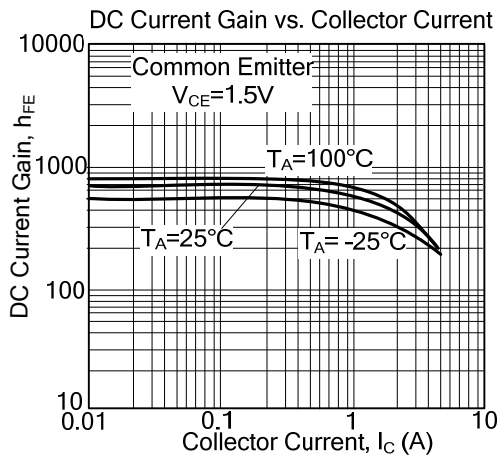
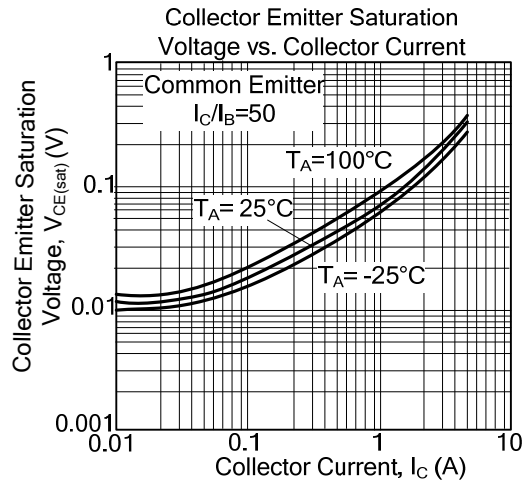
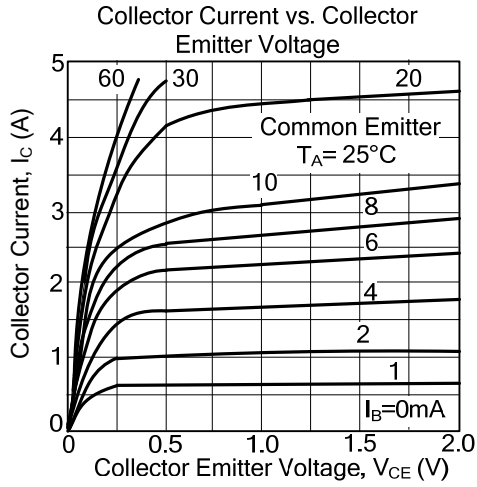
2. When a device is mounted on a glass epoxy board (35 mm*30 mm*1mm)

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

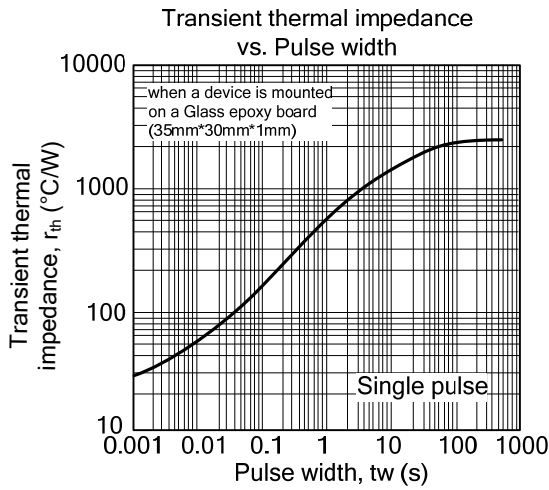
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---------------|---|-----|-----|------|---------------|
| Collector-Emitter Breakdown Voltage | BV_{CEO} | $I_C = 1\text{mA}$, $I_B = 0$ | 10 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=15\text{V}$, $I_E = 0$ | | | 0.1 | μA |
| Emitter Cut-Off Current | I_{EBO} | $V_{EB}= 5\text{V}$, $I_C=0$ | | | 0.1 | μA |
| DC Current Gain (Note) | h_{FE1} | $V_{CE}=1.5\text{V}$, $I_C=0.5\text{A}$ | 450 | | 700 | |
| | h_{FE2} | $V_{CE}=1.5\text{V}$, $I_C=2\text{A}$ | 320 | | | |
| | h_{FE3} | $V_{CE}=1.5\text{V}$, $I_C=5\text{A}$ | 170 | | | |
| Collector-Emitter Saturation Voltage (Note) | $V_{CE(SAT)}$ | $I_C=3\text{A}$, $I_B=60\text{mA}$ | | | 0.27 | V |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10\text{V}$, $I_E = 0$, $f=1\text{MHz}$ | | 25 | | pF |

Note: Pulse test

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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