

2SC4962

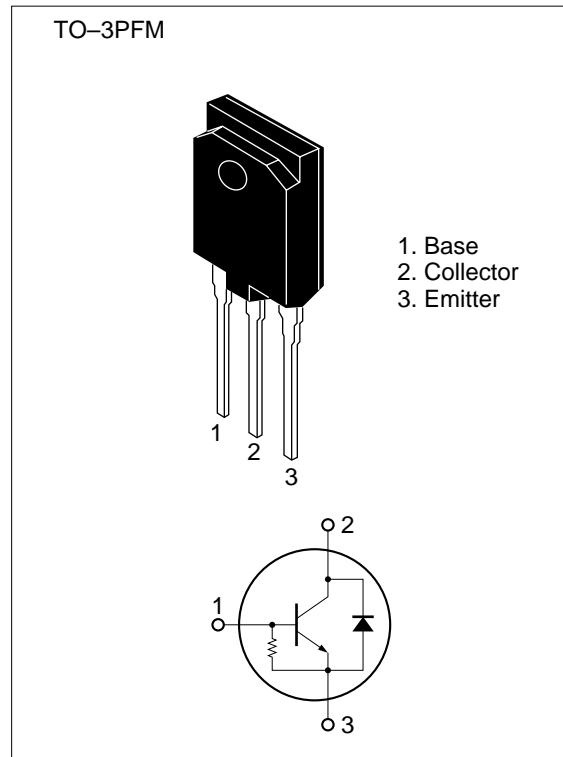
Silicon NPN Triple Diffused

Application

TV / character display horizontal deflection output

Features

- High breakdown voltage
 $V_{CES} = 1500 \text{ V}$
- Built-in damper diode type
- Isolated package
TO-3PFM



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

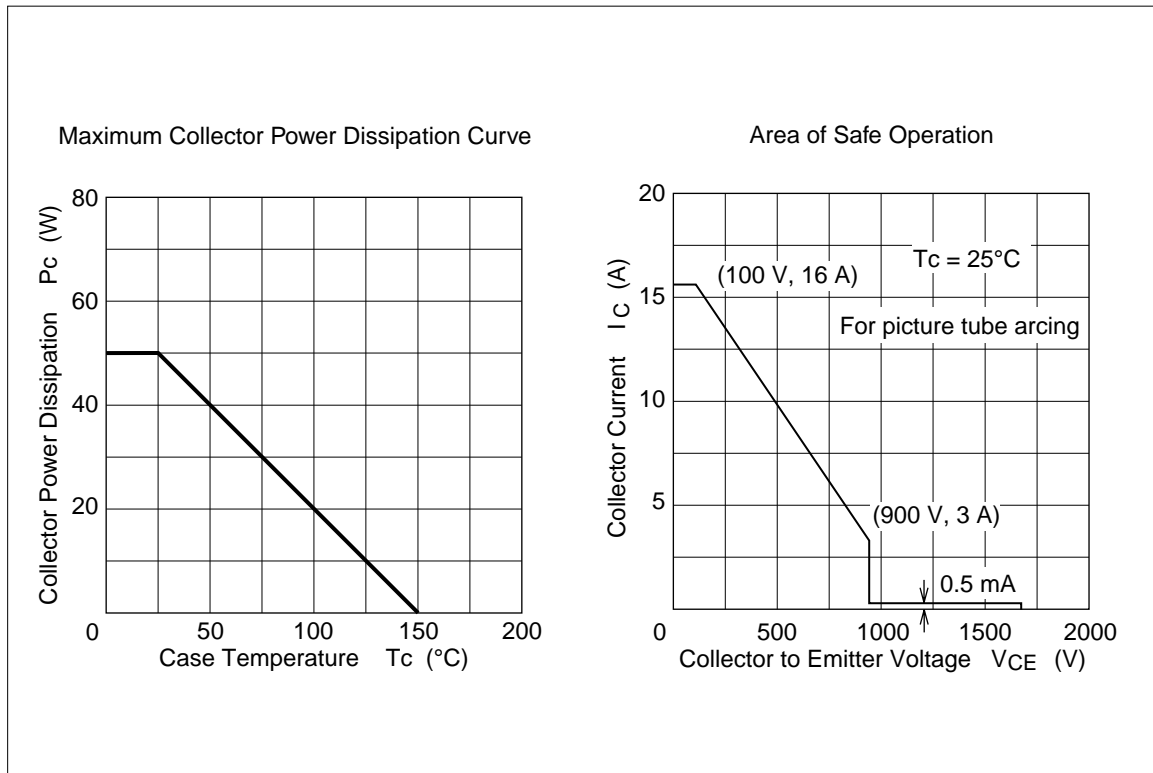
| Item | Symbol | Rating | Unit |
|------------------------------|-----------------------|-------------|------------------|
| Collector to emitter voltage | V_{CES} | 1700 | V |
| Emitter to base voltage | V_{EBO} | 6 | V |
| Collector current | I_C | 6 | A |
| Collector surge current | $i_{c(\text{surge})}$ | 16 | A |
| Collector power dissipation | P_C^{*1} | 50 | W |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |
| C to E diode forward current | I_D | 6 | A |

Note: 1. Value at $T_C = 25^\circ\text{C}$.

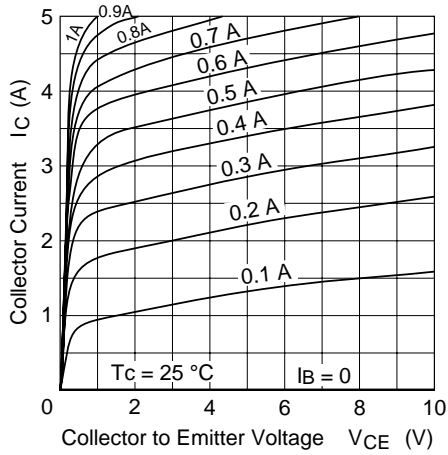
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Electrical Characteristics (Ta = 25°C)

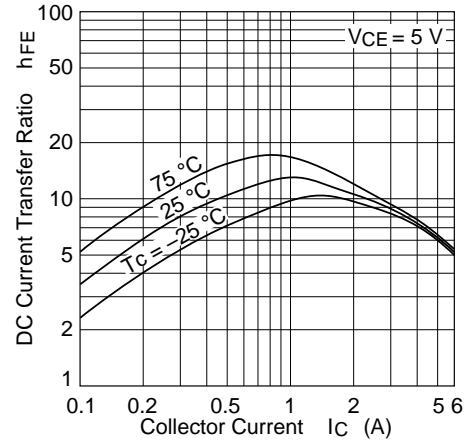
| Item | Symbol | Min | Typ | Max | Unit | Test Conditions |
|---|---------------|-----|-----|-----|---------------|--|
| Emitter to base breakdown voltage | $V_{(BR)EBO}$ | 6 | — | — | V | $I_E = 500 \text{ mA}, I_C = 0$ |
| Collector cutoff current | I_{CES} | — | — | 500 | μA | $V_{CE} = 1700 \text{ V}, R_{BE} = 0$ |
| DC current transfer ratio | h_{FE} | — | — | 25 | — | $V_{CE} = 5 \text{ V}, I_C = 1 \text{ A}$ |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | — | — | 5 | V | $I_C = 5 \text{ A}, I_B = 1 \text{ A}$ |
| Base to emitter saturation voltage | $V_{BE(sat)}$ | — | — | 1.5 | V | $I_C = 5 \text{ A}, I_B = 1 \text{ A}$ |
| C to E diode forward voltage | V_{ECF} | — | — | 2.0 | V | $I_F = 6 \text{ A}$ |
| Fall time | t_f | — | — | 0.6 | μs | $I_{CP} = 5 \text{ A}, I_{B1} = 1 \text{ A}, I_{B2} \approx -2 \text{ A}, f_H = 15.75 \text{ kHz}$ |



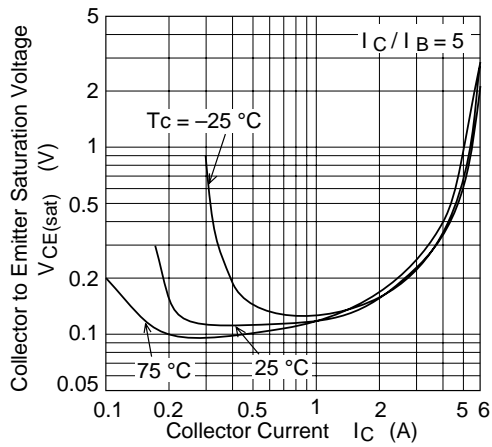
Typical Output Characteristics



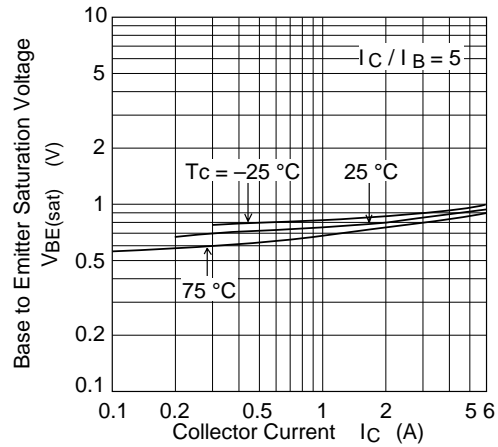
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector Current



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