

# PNP General Purpose Transistor

## SST6839

### ●Features

- 1)  $BV_{CE0} < -40V$  ( $I_c = -1mA$ )
- 2) Complements the SST6838.

### ●Package, marking, and packaging specifications

|                              |         |
|------------------------------|---------|
| Part No.                     | SST6839 |
| Packaging type               | SST3    |
| Marking                      | RFQ     |
| Code                         | T116    |
| Basic ordering unit (pieces) | 3000    |

### ●Absolute maximum ratings (Ta=25°C)

| Parameter                   | Symbol    | Limits   | Unit |
|-----------------------------|-----------|----------|------|
| Collector-base voltage      | $V_{CB0}$ | -50      | V    |
| Collector-emitter voltage   | $V_{CE0}$ | -40      | V    |
| Emitter-base voltage        | $V_{EB0}$ | -5       | V    |
| Collector current           | $I_c$     | -0.2     | A    |
| Collector power dissipation | $P_c$     | 0.2      | W    |
| Junction temperature        | $T_j$     | 150      | °C   |
| Storage temperature         | $T_{stg}$ | -55~+150 | °C   |

### ●Electrical characteristics (Ta=25°C)

| Parameter                            | Symbol        | Min. | Typ. | Max. | Unit    | Conditions  |
|--------------------------------------|---------------|------|------|------|---------|---|
| Collector-base breakdown voltage     | $BV_{CB0}$    | -50  | —    | —    | V       | $I_c = -10 \mu A$ (Ta=-40°C~+125°C)               |
| Collector-emitter breakdown voltage  | $BV_{CE0}$    | -40  | —    | —    | V       | $I_c = -1mA$ (Ta=-40°C~+125°C)                    |
| Collector cutoff current             | $I_{CBO}$     | —    | —    | -0.5 | $\mu A$ | $V_{CB} = -30V$ (Ta=85°C)                         |
|                                      |               | —    | —    | -5   |         | $V_{CB} = -30V$ (Ta=125°C)                        |
| Emitter cutoff current               | $I_{EBO}$     | —    | —    | -0.5 | $\mu A$ | $V_{EB} = -4V$ (Ta=85°C)                          |
|                                      |               | —    | —    | -5   |         | $V_{EB} = -4V$ (Ta=125°C)                         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | —    | —    | -0.5 | V       | $I_c/I_b = -100mA/-10mA$ (Ta=85°C)                |
|                                      |               | —    | —    | -0.7 |         | $I_c/I_b = -100mA/-10mA$ (Ta=125°C)               |
|                                      |               | 100  | —    | —    |         | $V_{CE}/I_c = -5V/-1mA$ (Ta=-40°C~+25°C)          |
| DC current transfer ratio            | $h_{FE1}$     | —    | —    | 800  | —       | $V_{CE}/I_c = -5V/-1mA$ (Ta=85°C)                 |
|                                      |               | —    | —    | 1000 |         | $V_{CE}/I_c = -5V/-1mA$ (Ta=125°C)                |
|                                      |               | 100  | —    | —    |         | $V_{CE}/I_c = -5V/-100mA$ (Ta=-40°C~+25°C)        |
| DC current transfer ratio            | $h_{FE2}$     | 100  | —    | —    | —       | $V_{CE}/I_c = -5V/-100mA$ (Ta=-40°C~+25°C)        |
| Transition frequency                 | $f_r$         | —    | 140  | —    | MHz     | $V_{CE} = -12V, I_c = -2mA, f = 100MHz$ (Ta=25°C) |
| Collector output capacitance         | $C_{ob}$      | —    | 3.5  | —    | pF      | $V_{CB} = -12V, I_E = 0A, f = 1MHz$ (Ta=25°C)     |
| Emitter input capacitance            | $C_{ib}$      | —    | 17   | —    | pF      | $V_{EB} = -0.5V, I_c = 0A, f = 1MHz$ (Ta=25°C)    |

### ●Electrical characteristic curves

The electrical characteristic curves for these products are the same as those of BC858BW and BC858B. Refer to pages 603 to 606.

### ●External dimensions (Units : mm)

