

# Low Frequency Transistor (50V, 2A)

## 2SC4672

### ●Features

- 1) Low saturation voltage, typically  $V_{CE(sat)} = 0.1V$  at  $I_C/I_B = 1A/50mA$ .
- 2) Excellent DC current gain characteristics.
- 3) Complements the 2SA1797.

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

| Parameter                   | Symbol    | Limits   | Unit        |
|-----------------------------|-----------|----------|-------------|
| Collector-base voltage      | $V_{CBO}$ | 60       | V           |
| Collector-emitter voltage   | $V_{CEO}$ | 50       | V           |
| Emitter-base voltage        | $V_{EBO}$ | 6        | V           |
| Collector current           | $I_C$     | 2        | A (DC)      |
|                             |           | 5        | A (Pulse) * |
| Collector power dissipation | $P_C$     | 0.5      | W           |
| Junction temperature        | $T_j$     | 150      | °C          |
| Storage temperature         | $T_{stg}$ | -55~+150 | °C          |

\* Single pulse, Pw=10ms

### ●Packaging specifications and hFE

| Type                         | 2SC4672 |
|------------------------------|---------|
| Package                      | MPT3    |
| hFE                          | PQ      |
| Marking                      | DK *    |
| Code                         | T100    |
| Basic ordering unit (pieces) | 1000    |

\* Denotes hFE

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

| Parameter                            | Symbol          | Min. | Typ. | Max. | Unit    | Conditions                             |
|--------------------------------------|-----------------|------|------|------|---------|----------------------------------------|
| Collector-base breakdown voltage     | $BV_{CBO}$      | 60   | —    | —    | V       | $I_C = 50\mu A$                        |
| Collector-emitter breakdown voltage  | $BV_{CEO}$      | 50   | —    | —    | V       | $I_C = 1mA$                            |
| Emitter-base breakdown voltage       | $BV_{EBO}$      | 6    | —    | —    | V       | $I_E = 50\mu A$                        |
| Collector cutoff current             | $I_{CBO}$       | —    | —    | 0.1  | $\mu A$ | $V_{CB} = 60V$                         |
| Emitter cutoff current               | $I_{EBO}$       | —    | —    | 0.1  | $\mu A$ | $V_{EB} = 5V$                          |
| Collector-emitter saturation voltage | $V_{CE(sat)}$   | —    | 0.1  | 0.35 | V       | $I_C/I_B = 1A/50mA$ *                  |
| DC current transfer ratio            | hFE             | 82   | —    | 270  | —       | $V_{CE} = 2V, I_C = 0.5A$ *            |
| Transition frequency                 | f <sub>r</sub>  | —    | 210  | —    | MHz     | $V_{CE} = 2V, I_E = -0.5A, f = 100MHz$ |
| Output capacitance                   | C <sub>ob</sub> | —    | 25   | —    | pF      | $V_{CB} = 10V, I_E = 0A, f = 1MHz$     |

\*Measured using pulse current.

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