

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_{CB0} | 60 | V |
| Collector-emitter voltage | V_{CE0} | 50 | V |
| Emitter-base voltage | V_{EB0} | 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, $P_w=10ms$

●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_{CB0} | 60 | - | - | V | $I_C=50\mu A$ |
| Collector-emitter breakdown voltage | BV_{CE0} | 50 | - | - | V | $I_C=1mA$ |
| Emitter-base breakdown voltage | BV_{EB0} | 6 | - | - | V | $I_E=50\mu A$ |
| Collector cutoff current | I_{CBO} | - | - | 0.1 | μA | $V_{CB}=60V$ |
| Emitter cutoff current | I_{EBO} | - | - | 0.1 | μA | $V_{EB}=5V$ |
| 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_T | - | 210 | - | MHz | $V_{CE}=2V, I_E=-0.5A, f=100MHz$ |
| Output capacitance | C_{ob} | - | 25 | - | pF | $V_{CB}=10V, I_E=0A, f=1MHz$ |

*Measured using pulse current.