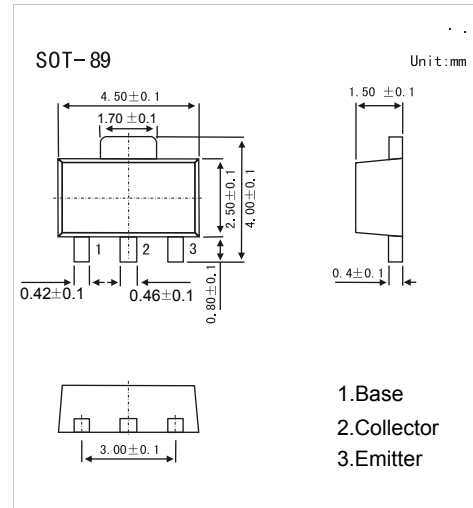


NPN Transistors

2SC4672

■ Features

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



■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | 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 | 3 | A |
| | I_C (Pulse) *1 | 6 | A |
| Collector power dissipation | P_C | 0.5 | W |
| | P_C *2 | 2 | W |
| Junction temperature | T_j | 150 | $^\circ C$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ C$ |

*1. Single pulse, $P_w=10ms$

*2. $40X40X^t 0.7mm$ Ceramic board

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|----------------------------------|-----|------|------|---------|
| Collector-base breakdown voltage | V_{CBO} | $I_C=50\mu A$ | 60 | | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C=1mA$ | 50 | | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E=50\mu A$ | 6 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB}=60V$ | | | 0.1 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB}=5V$ | | | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=2V, I_C=0.5A$ | 82 | | 390 | |
| | | $V_{CE}=2V, I_C=1.5A$ | 45 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=1A, I_B=50mA$ | | 0.13 | 0.35 | V |
| Output capacitance | C_{ob} | $V_{CB}=10V, I_E=0A, f=1MHz$ | | 25 | | pF |
| Transition frequency | f_T | $V_{CE}=2V, I_E=-0.5A, f=100MHz$ | | 210 | | MHz |

■ h_{FE} Classification(1)

| Markink | DK* | | |
|----------|--------|---------|---------|
| Rank | P | Q | R |
| h_{FE} | 82~180 | 120~270 | 180~390 |