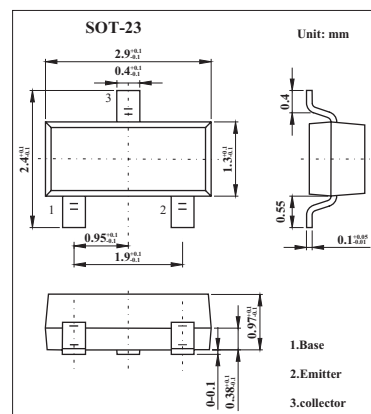


Power Transistor

2SD1757K

■ Features

- Low $V_{CE(sat)}$. (Typ.8mV at $I_C/I_B = 10/1mA$).
- Optimal for muting.

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

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|-------------|------------|
| Collector-base voltage | V_{CBO} | 30 | V |
| Collector-emitter voltage | V_{CEO} | 15 | V |
| Emitter-base voltage | V_{EBO} | 6.5 | V |
| Collector current * | I_C | 0.5 | A |
| Collector power dissipation | P_C | 0.2 | W |
| Junction temperature | T_j | 150 | $^\circ C$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ C$ |

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

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--------------------------------------|---------------|----------------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage | BV_{CBO} | $I_C=50\mu A$ | 30 | | | V |
| Collector-emitter breakdown voltage | BV_{CEO} | $I_C=1mA$ | 15 | | | V |
| Emitter-base breakdown voltage | BV_{EBO} | $I_E=50\mu A$ | 6.5 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB}=20V$ | | | 0.5 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB}=4V$ | | | 0.5 | μA |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C/I_B=500mA/50mA$ | | 0.1 | 0.4 | V |
| DC current transfer ratio | h_{FE} | $V_{CE}=3V, I_C=100mA$ | 120 | | 560 | |
| Output capacitance | f_T | $V_{CE}=5V, I_E=-50mA, f=100MHz$ | | 150 | | MHz |
| Transition frequency | C_{ob} | $V_{CB}=10V, I_E=0A, f=1MHz$ | | 15 | | pF |

■ h_{FE} Classification

| Marking | AA | | |
|----------|---------|---------|---------|
| | Q | R | S |
| h_{FE} | 120~270 | 180~390 | 270~560 |