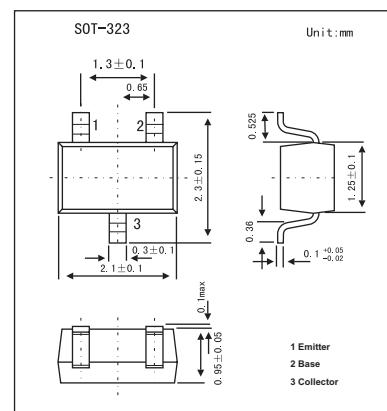


General Purpose Transistor

2SD2351

■ Features

- High DC current gain.
- High emitter-base voltage. ($V_{CBO}=12V$)
- Low saturation voltage.
(Typ. $V_{CE(sat)}=0.3V$ at $I_C/I_B=50mA/5mA$)



■ 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} | 12 | V |
| Collector current | I_C | 0.15 | A(DC) |
| | | 0.2 | A(Pulse)* |
| Collector power dissipation | P_C | 0.2 | W |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

* Single pulse $P_w=100ms$.

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

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--------------------------------------|---------------|----------------------------------|-----|-----|------|---------|
| Collector-base breakdown voltage | BV_{CBO} | $I_C=10\mu A$ | 60 | | | V |
| Collector-emitter breakdown voltage | BV_{CEO} | $I_C=1mA$ | 50 | | | V |
| Emitter-base breakdown voltage | BV_{EBO} | $I_E=10\mu A$ | 12 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB}=50V$ | | | 0.3 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB}=12V$ | | | 0.3 | μA |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C/I_B=50mA/5mA$ | | | 0.3 | V |
| DC current transfer ratio | h_{FE} | $V_{CE}/I_C=5V/1mA$ | 820 | | 2700 | |
| Output capacitance | f_T | $V_{CE}=5V, I_E=-10mA, f=100MHz$ | | 250 | | MHz |
| Transition frequency | C_{ob} | $V_{CB}=5V, I_E=0A, f=1MHz$ | | 3.5 | | pF |

■ hFE Classification

| Marking | BJV | BJW |
|----------|----------|-----------|
| h_{FE} | 820~1800 | 1200~2700 |