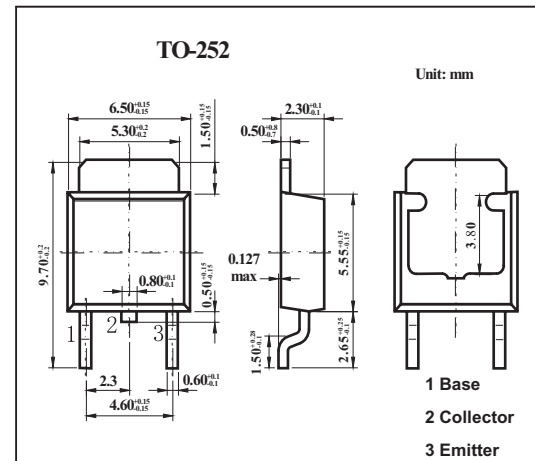


Silicon NPN Triple Diffused Type

2SC5356

■ Features

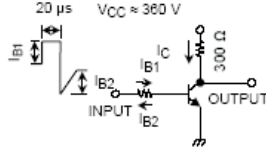
- Excellent switching times: $t_r = 0.5 \mu\text{s}$ (max) ($I_c = 1.2 \text{ A}$)
- High collectors breakdown voltage: $V_{CE0} = 800 \text{ V}$
- High DC current gain: $h_{FE} = 15$ (min) ($I_c = 0.15 \text{ A}$)

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

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|--------------------------|------------------|
| Collector-base voltage | V_{CBO} | 900 | V |
| Collector-emitter voltage | V_{CEO} | 800 | V |
| Emitter-base voltage | V_{EBO} | 7 | V |
| Collector current (DC) | I_c | 3 | A |
| Collector current (Pulse) | I_{CP} | 5 | |
| Base current | I_B | 1 | A |
| Collector power dissipation | P_C | $T_a = 25^\circ\text{C}$ | 1.5 |
| | | $T_C = 25^\circ\text{C}$ | 25 |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature range | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

2SC5356

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit | |
|--------------------------------------|---------------|---|-----|-----|-----|---------------|-----|
| Collector cut-off current | I_{CBO} | $V_{CB} = 720\text{ V}, I_E = 0$ | | | 100 | μA | |
| Emitter cut-off current | I_{EBO} | $V_{EB} = 7\text{ V}, I_C = 0$ | | | 10 | μA | |
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = 1\text{ mA}, I_E = 0$ | 900 | | | V | |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = 10\text{ mA}, I_B = 0$ | 800 | | | V | |
| DC current gain | h_{FE} | $V_{CE} = 5\text{ V}, I_C = 1\text{ mA}$ | 10 | | | | |
| | | $V_{CE} = 5\text{ V}, I_C = 0.15\text{ A}$ | 15 | | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 1.2\text{ A}, I_B = 0.24\text{ A}$ | | | 1.0 | V | |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = 2\text{ A}, I_B = 0.24\text{ A}$ | | | 1.3 | V | |
| Switching time Rise time | t_r |  <p>$I_{B1} = 0.24\text{ A}, I_{B2} = -0.48\text{ A}$ DUTY CYCLE $\leq 1\%$</p> | | | 0.7 | μs | |
| Switching time Storage time | t_{stg} | | | | | | 4.0 |
| Switching time Fall time | t_f | | | | | | 0.5 |

■ Marking

| | |
|---------|-------|
| Marking | C5356 |
|---------|-------|