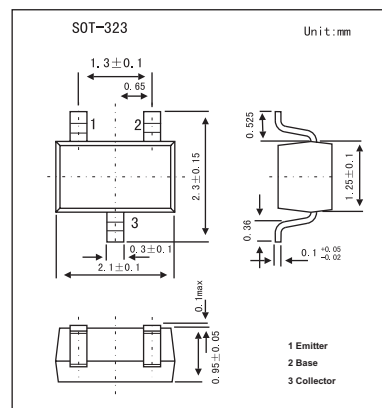


## PNP General Purpose Transistor

## 2PA1576

## ■ Features

- Low current (max. 100 mA)
- Low voltage (max. 40 V).
- Low collector capacitance (typ. 2.5 pF).

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

| Parameter                                   | Symbol        | Rating      | Unit             |
|---------------------------------------------|---------------|-------------|------------------|
| Collector-base voltage                      | $V_{CB0}$     | -50         | V                |
| Collector-emitter voltage                   | $V_{CEO}$     | -40         | V                |
| Emitter-base voltage                        | $V_{EB0}$     | -5          | V                |
| Collector current                           | $I_C$         | -100        | mA               |
| Peak collector current                      | $I_{CM}$      | -200        | mA               |
| Peak base current                           | $I_{BM}$      | -200        | mA               |
| Total power dissipation                     | $P_{tot}$     | 200         | mW               |
| Storage temperature                         | $T_{stg}$     | -65 to +150 | $^\circ\text{C}$ |
| Junction temperature                        | $T_j$         | 150         | $^\circ\text{C}$ |
| Operating ambient temperature               | $T_{amb}$     | -65 to +150 | $^\circ\text{C}$ |
| thermal resistance from junction to ambient | $R_{th\ j-a}$ | 625         | K/W              |

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

| Parameter                                           | Symbol        | Testconditons                                                     | Min               | Typ | Max               | Unit          |
|-----------------------------------------------------|---------------|-------------------------------------------------------------------|-------------------|-----|-------------------|---------------|
| Collector cut-off current                           | $I_{CBO}$     | $I_E = 0; V_{CB} = -30\text{ V}$                                  |                   |     | -100              | nA            |
|                                                     |               | $I_E = 0; V_{CB} = -30\text{ V}; T_j = 150\text{ }^\circ\text{C}$ |                   |     | -5                | $\mu\text{A}$ |
| Emitter cut-off current                             | $I_{EBO}$     | $I_C = 0; V_{EB} = -4\text{ V}$                                   |                   |     | -100              | nA            |
| DC current gain<br>2PA1576Q<br>2PA1576R<br>2PA1576S | $h_{FE}$      | $I_C = -1\text{ mA}; V_{CE} = -6\text{ V}$                        | 120<br>180<br>270 |     | 270<br>390<br>560 |               |
| Collector-emitter saturation voltage                | $V_{CE(sat)}$ | $I_C = -50\text{ mA}; I_B = -5\text{ mA}; *$                      |                   |     | -500              | mV            |
| Collector capacitance                               | $C_c$         | $I_E = i_e = 0; V_{CB} = -12\text{ V}; f = 1\text{ MHz}$          |                   | 2.5 | 3.5               | pF            |
| Transition frequency                                | $f_T$         | $I_C = -2\text{ mA}; V_{CE} = -12\text{ V}; f = 100\text{ MHz}$   | 100               |     |                   | MHz           |

\* Pulse test:  $t_p \leq 300\text{ }\mu\text{s}; \delta \leq 0.02$ .

■  $h_{FE}$  Classification

| TYPE    | 2PA1576Q | 2PA1576R | 2PA1576S |
|---------|----------|----------|----------|
| Marking | FQ       | FR       | FS       |