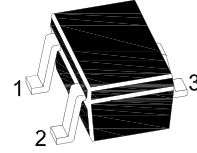


### PNP Silicon Epitaxial Planar Transistor

General small signal amplifier



1.Base 2.Emitter 3.Collector  
SOT-523 Plastic Package

#### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                 | Symbol     | Value         | Unit             |
|---------------------------|------------|---------------|------------------|
| Collector Base Voltage    | $-V_{CBO}$ | 50            | V                |
| Collector Emitter Voltage | $-V_{CEO}$ | 50            | V                |
| Emitter Base Voltage      | $-V_{EBO}$ | 5             | V                |
| Collector Current         | $-I_C$     | 150           | mA               |
| Power Dissipation         | $P_{tot}$  | 150           | mW               |
| Junction Temperature      | $T_j$      | 150           | $^\circ\text{C}$ |
| Storage Temperature Range | $T_{stg}$  | - 55 to + 150 | $^\circ\text{C}$ |

#### Characteristics at $T_a = 25^\circ\text{C}$

| Parameter                                                                                     | Symbol         | Min. | Max. | Unit |
|-----------------------------------------------------------------------------------------------|----------------|------|------|------|
| DC Current Gain<br>at $-V_{CE} = 6\text{ V}$ , $-I_C = 2\text{ mA}$<br><br>Current Gain Group | O $h_{FE}$     | 70   | 140  | -    |
|                                                                                               | Y $h_{FE}$     | 120  | 240  | -    |
|                                                                                               | G $h_{FE}$     | 200  | 400  | -    |
|                                                                                               | L $h_{FE}$     | 300  | 700  | -    |
| Collector Base Cutoff Current<br>at $-V_{CB} = 50\text{ V}$                                   | $-I_{CBO}$     | -    | 100  | nA   |
| Emitter Base Cutoff Current<br>at $-V_{EB} = 5\text{ V}$                                      | $-I_{EBO}$     | -    | 100  | nA   |
| Collector Base Breakdown Voltage<br>at $-I_C = 100\text{ }\mu\text{A}$                        | $-V_{(BR)CBO}$ | 50   | -    | V    |
| Collector Emitter Breakdown Voltage<br>at $-I_C = 1\text{ mA}$                                | $-V_{(BR)CEO}$ | 50   | -    | V    |
| Emitter Base Breakdown Voltage<br>at $-I_E = 10\text{ }\mu\text{A}$                           | $-V_{(BR)EBO}$ | 5    | -    | V    |
| Collector Emitter Saturation Voltage<br>at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$     | $-V_{CE(sat)}$ | -    | 0.3  | V    |
| Collector Output Capacitance<br>at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$               | $C_{ob}$       | -    | 7    | pF   |
| Transition Frequency<br>at $-V_{CE} = 10\text{ V}$ , $-I_C = 1\text{ mA}$                     | $f_T$          | 80   | -    | MHz  |

