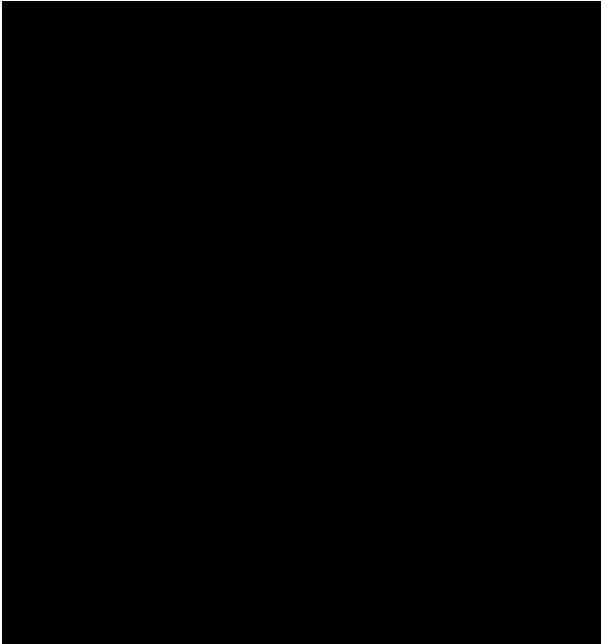


PNP Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1

Mechanical Data

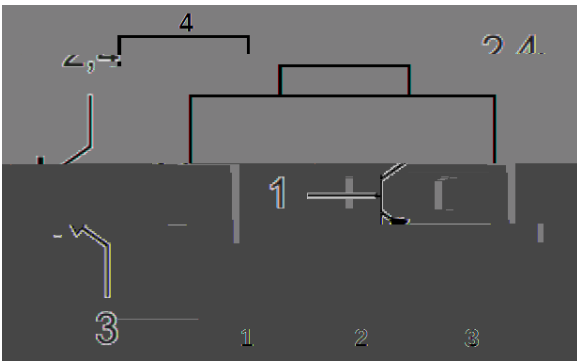
Package: SOT-223

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking:

| Product | Marking |
|----------|----------|
| BCP51-10 | BCP51-10 |
| BCP51-16 | BCP51-16 |

Equivalent circuit



Maximum Ratings (Ta=25 unless otherwise noted)

| Item | Symbol | Unit | Conditions | Value |
|---|-----------|------|----------------------------|-------------|
| Minimum Collector-Emitter Voltage | V_{CEO} | V | $I_C = -10mA, I_B = 0$ | -45 |
| Minimum Collector-Base Voltage | V_{CBO} | V | $I_C = -100\mu A, I_E = 0$ | -45 |
| Minimum Emitter-Base Voltage | V_{EBO} | V | $I_E = -100\mu A, I_C = 0$ | -5 |
| Collector Current | I_C | A | | -1 |
| Power Dissipation | P_D | W | | 1 |
| Thermal Resistance From Junction To Ambient | R_{JA} | /W | | 125 |
| Operation Junction Temperature | T_j | | | -55 to +150 |
| Storage Temperature | T_{stg} | | | -55 to +150 |

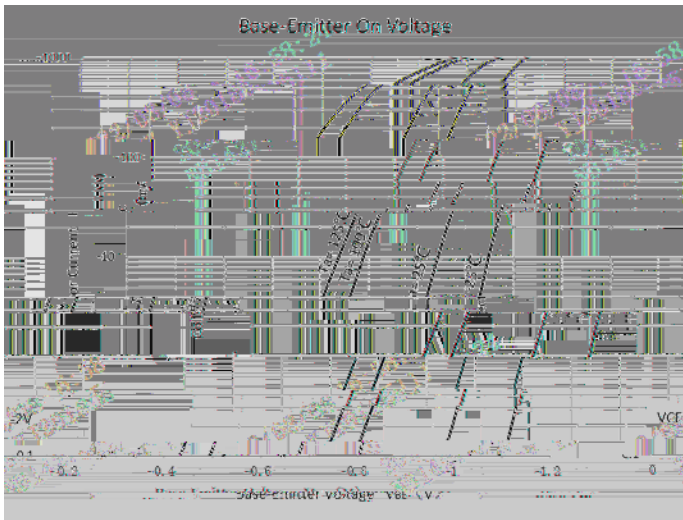
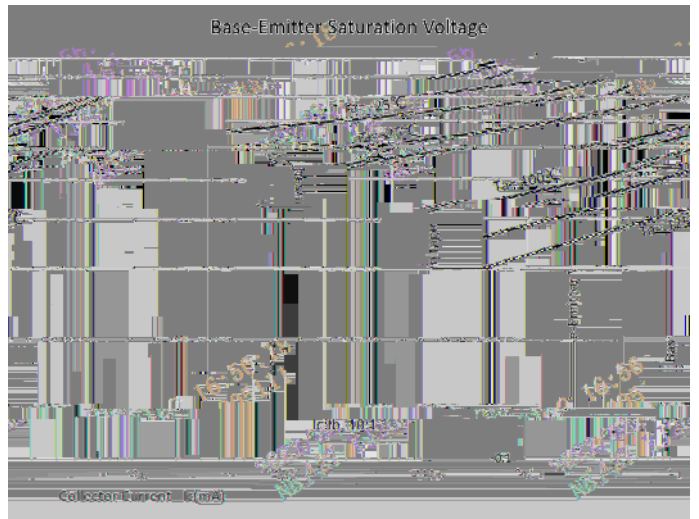
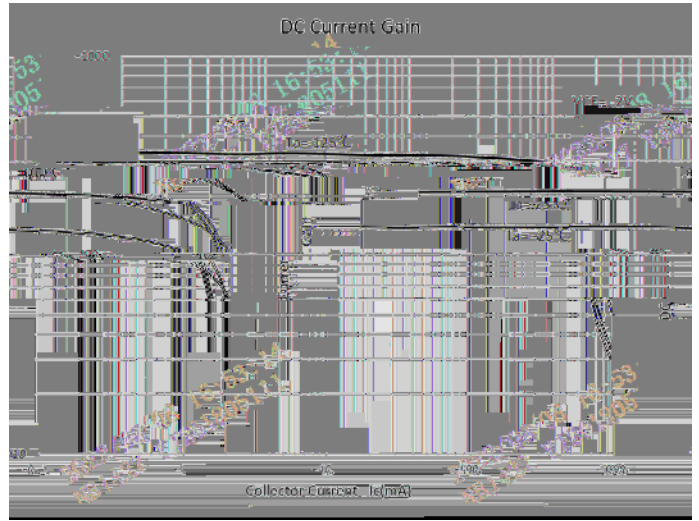
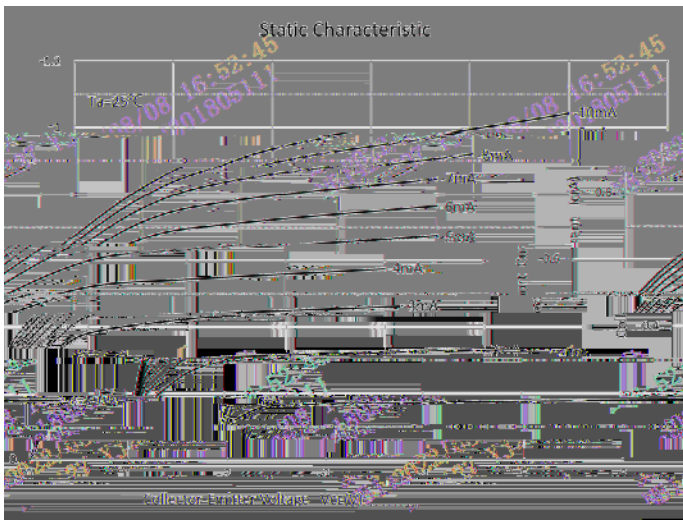


BCP51

Electrical Characteristics (Ta=25 unless otherwise noted)

| Item | Symbol | Unit | Conditions | Min | TYP | Max |
|--------------------------------------|---------------|------|------------------------------|-----|-----|------|
| Collector-base breakdown voltage | V_{CBO} | V | $I_C = -100\mu A, I_E = 0$ | -45 | - | - |
| Collector-emitter breakdown voltage | V_{CEO} | V | $I_C = -10mA, I_B = 0$ | -45 | - | - |
| Emitter-base breakdown voltage | V_{EBO} | V | $I_E = -100\mu A, I_C = 0$ | -5 | - | - |
| Collector-base cut-off current | I_{CBO} | nA | $V_{CB} = -30V, I_E = 0$ | - | - | -100 |
| Collector-emitter cut-off current | I_{EBO} | nA | $V_{EB} = -5V, I_C = 0$ | - | - | -100 |
| DC current gain | h_{FE} | | $V_{CE} = -2V, I_C = -5mA$ | 63 | - | - |
| | h_{FE} | | $V_{CE} = -2V, I_C = -150mA$ | 63 | - | 250 |
| | h_{FE} | | $V_{CE} = -2V, I_C = -500mA$ | 40 | - | - |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | V | $I_C = -500mA, I_B = -50mA$ | - | - | -0.5 |

Characteristics (Typical)



v627 3DFNDJH 2XWOLQH 'LPHQVLRQV

v627 6XJJHVWHG 3DG /D\RXW

