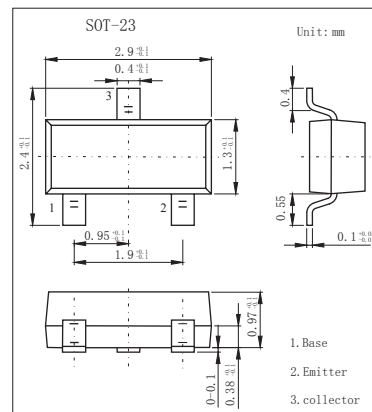


NPN Transistors

KST8050

■ Features

- Collector Current: $I_C=1.5A$



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

| Parameter | Symbol | Rating | Unit |
|-------------------------------|-----------|------------|------------|
| Collector-Base Voltage | V_{CB0} | 40 | V |
| Collector-Emitter Voltage | V_{CE0} | 25 | V |
| Emitter-Base Voltage | V_{EB0} | 5 | V |
| Collector Current -Continuous | I_C | 1.5 | A |
| Collector Dissipation | P_C | 0.3 | W |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | -55 to 150 | $^\circ C$ |

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

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|-----|---------|
| Collector-base breakdown voltage | V_{CB0} | $I_C = 100 \mu A, I_E = 0$ | 40 | | | V |
| Collector-emitter breakdown voltage | V_{CE0} | $I_C = 1 mA, I_B = 0$ | 25 | | | V |
| Emitter-base Breakdown voltage | V_{EB0} | $I_E = 100 \mu A, I_C = 0$ | 5 | | | V |
| Collector-base cut-off current | I_{CB0} | $V_{CB} = 40 V, I_E = 0$ | | | 0.1 | μA |
| Collector-emitter cut-off current | I_{CE0} | $V_{CE} = 20 V, I_B = 0$ | | | 0.1 | μA |
| Emitter-base cut-off current | I_{EB0} | $V_{EB} = 5 V, I_C = 0$ | | | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = 1 V, I_C = 100 mA$ | 120 | | 400 | |
| | | $V_{CE} = 1 V, I_C = 800 mA$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 800 mA, I_B = 80 mA$ | | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = 800 mA, I_B = 80 mA$ | | | 1.2 | V |
| Transition frequency | f_T | $V_{CE} = 10 V, I_C = 50 mA, f = 30 MHz$ | 100 | | | MHz |

■ h_{FE} Classification

| Marking | Y1 | | |
|----------|---------|---------|---------|
| | L | H | J |
| h_{FE} | 120~200 | 200~350 | 300~400 |

KST8050

Typical Characteristics

