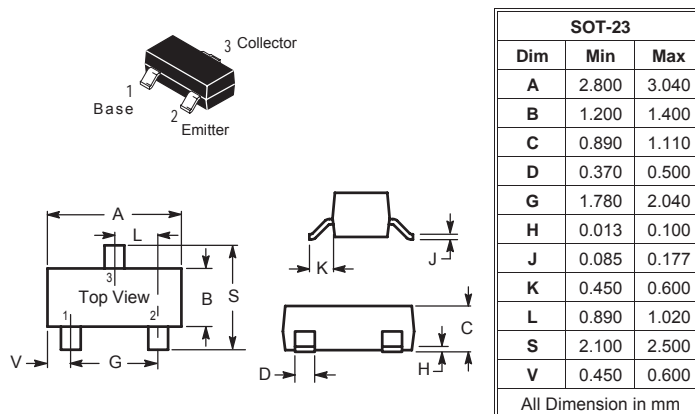


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- High emitter-base voltage: $V_{EBO}=12V(\text{Min})$
- low on resistance: $R_{on}=0.6\Omega(\text{max})(I_B=1\text{mA})$

PACKAGE DIMENSIONS



ABSOLUTE MAXIMUM RATINGS at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Ratings | Unit |
|--------------------------------|----------------|------------------|------------------|
| Collector to Base Voltage | V_{CBO} | 25 | V |
| Collector to Emitter Voltage | V_{CEO} | 20 | V |
| Emitter to Base Voltage | V_{EBO} | 12 | V |
| Collector Current - Continuous | I_C | 300 | mA |
| Collector Power Dissipation | P_C | 200 | mW |
| Junction, Storage Temperature | T_J, T_{STG} | +150, -55 ~ +150 | $^\circ\text{C}$ |

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

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---------------------------|------|------|------|---------------|--|
| BVC_{BO} | 25 | - | - | V | $I_C = 100 \mu\text{A}$ |
| BV_{CEO} | 20 | - | - | V | $I_C = 1 \text{ mA}$ |
| BVE_{BO} | 12 | - | - | V | $I_E = 100 \mu\text{A}$ |
| I_{CBO} | - | - | 0.1 | μA | $V_{CB} = 25 \text{ V}$ |
| I_{EBO} | - | - | 0.1 | μA | $V_{EB} = 12 \text{ V}$ |
| $h_{FE1}(\text{FORWARD})$ | 200 | - | 1000 | | $V_{CE} = 2 \text{ V}, I_C = 4 \text{ mA}$ |
| $h_{FE1}(\text{REVERSE})$ | 20 | - | - | | $V_{CE} = 2 \text{ V}, I_C = 4 \text{ mA}$ |
| $V_{CE(\text{sat})}$ | - | - | 0.25 | V | $I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$ |
| $V_{BE(\text{sat})}$ | - | - | 1 | V | $I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$ |
| f_T | - | 60 | - | MHz | $V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}, f = 100 \text{ MHz}$ |
| C_{OB} | - | 10 | - | pF | $V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ |
| $R_{(ON)}$ | - | 0.6 | - | Ω | $V_{IN} = 0.3 \text{ V}, I_B = 1 \text{ mA}, f = 1 \text{ KHz}$ |

CHARACTERISTIC CURVES

KTD1304

