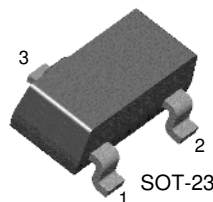


KST4126

General Purpose Transistor



1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

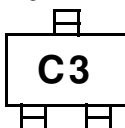
| Symbol | Parameter | Value | Units |
|---------------|--|-------|--------------------|
| V_{CBO} | Collector-Base Voltage | -25 | V |
| V_{CEO} | Collector-Emitter Voltage | -25 | V |
| V_{EBO} | Emitter-Base Voltage | -4 | V |
| I_C | Collector Current | -200 | mA |
| P_C | Collector Power Dissipation | 350 | mW |
| T_{STG} | Storage Temperature | 150 | $^\circ\text{C}$ |
| $R_{TH(j-a)}$ | Thermal Resistance junction to Ambient | 357 | $^\circ\text{C/W}$ |

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|---------------|--|--|-----------|-------|-------|
| BV_{CBO} | Collector-Base Breakdown Voltage | $I_C = -10\mu\text{A}, I_E = 0$ | -25 | | V |
| BV_{CEO} | * Collector-Emitter Breakdown Voltage | $I_C = -1\text{mA}, I_E = 0$ | -25 | | V |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E = -10\mu\text{A}, I_C = 0$ | -4 | | V |
| I_{CBO} | Collector Cut-off Current | $V_{CB} = -20\text{V}, I_E = 0$ | | -50 | nA |
| I_{EBO} | Emitter Cut-off Current | $V_{BE} = -3\text{V}, I_C = 0$ | | -50 | nA |
| h_{FE} | * DC Current Gain | $V_{CE} = -1\text{V}, I_C = -2\text{mA}$ $V_{CE} = -1\text{V}, I_C = -50\text{mA}$ | 120 60 | 360 | |
| $V_{CE(sat)}$ | * Collector-Emitter Saturation Voltage | $I_C = -50\text{mA}, I_B = -5\text{mA}$ | | -0.4 | V |
| $V_{BE(sat)}$ | * Base-Emitter Saturation Voltage | $I_C = -50\text{mA}, I_B = -5\text{mA}$ | | -0.95 | V |
| f_T | Current Gain Bandwidth Product | $V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$ | 250 | | MHz |
| C_{ib} | Input Capacitance | $V_{BE} = -0.5\text{V}, I_C = 0, f = 1\text{MHz}$ | | 10 | pF |
| C_{ob} | Output Capacitance | $V_{CB} = -5\text{V}, I_E = 0, f = 1\text{MHz}$ | | 4.5 | pF |
| NF | Noise Figure | $V_{CE} = -5\text{V}, I_C = -100\mu\text{A}, R_S = 1\text{K}\Omega$ Noise Bandwidth=10Hz to 15.7KHz | | 4 | dB |

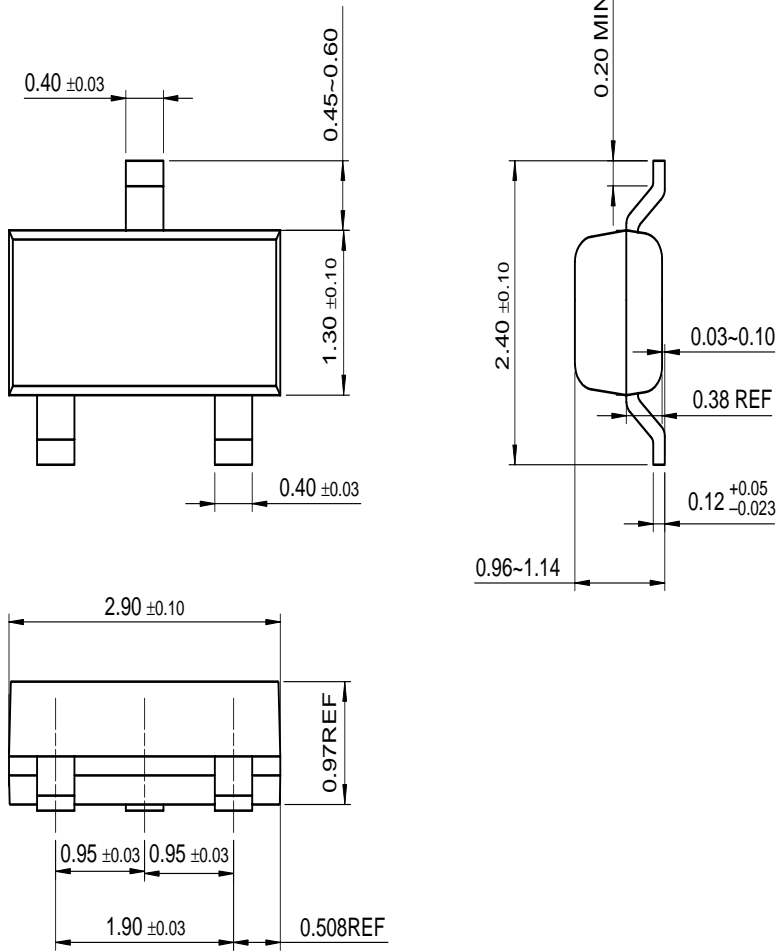
* Pulse Test: $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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