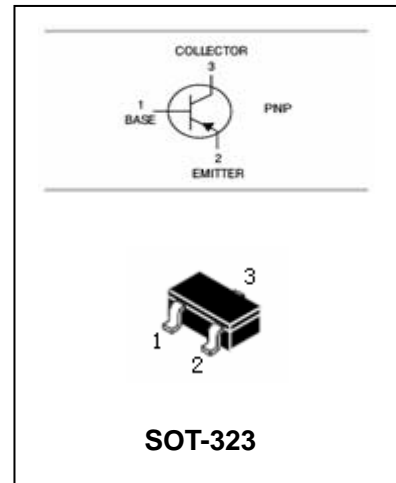


PNP Silicon Epitaxial Planar Transistor

MMSTA92

FEATURES

- Power dissipation.($P_C=200\text{mW}$)
- Epitaxial planar die construction.
- Complementary to MMSTA42.
- Also available in lead free version.



APPLICATIONS

- General purpose application and switching application.

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| MMSTA92 | K3R | SOT-323 |

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Symbol | Parameter | Value | Units |
|----------------|----------------------------------|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -310 | V |
| V_{CEO} | Collector-Emitter Voltage | -305 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current -Continuous | -300 | mA |
| P_C | Collector Dissipation | 200 | mW |
| T_j, T_{stg} | Junction and Storage Temperature | -55~150 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|-------------------------------------|---------------|---|-----------------|-----|-------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu\text{A}, I_E=0$ | -310 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}, I_B=0$ | -305 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100\mu\text{A}, I_C=0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-200\text{V}, I_E=0$ | | | -0.25 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-5\text{V}, I_C=0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=-10\text{V}, I_C=-1\text{mA}$ $V_{CE}=-10\text{V}, I_C=-10\text{mA}$ $V_{CE}=-10\text{V}, I_C=-80\text{mA}$ | 60 100 60 | | 200 | |

PNP Silicon Epitaxial Planar Transistor

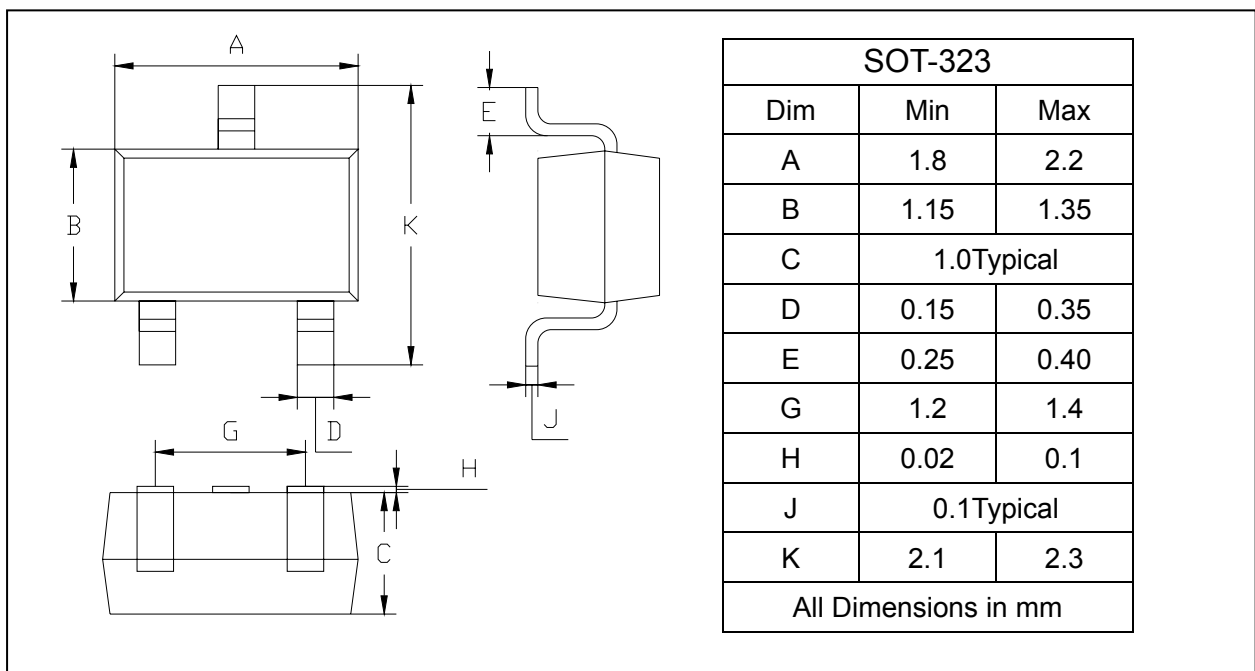
MMSTA92

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|-----|-----|------|------|
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-20mA, I_B=-2mA$ | | | -0.2 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=-20mA, I_B=-2mA$ | | | -0.9 | V |
| Transition frequency | f_T | $V_{CE}=-20V, I_C=-10mA,$ $f=30MHz$ | 50 | | | MHz |

PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



PACKAGE INFORMATION

| Device | Package | Shipping |
|---------|---------|----------------|
| MMSTA92 | SOT-323 | 3000/Tape&Reel |