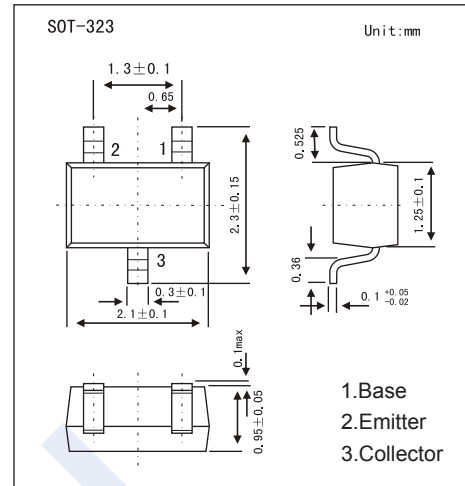


PNP Transistors

MMST2907A (MMST2907A)

■ Features

- Epitaxial planar die construction
- Complementary to MMST2222A



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

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------------|
| Collector - Base Voltage | V_{CB0} | -60 | V |
| Collector - Emitter Voltage | V_{CE0} | -60 | |
| Emitter - Base Voltage | V_{EB0} | -5 | |
| Collector Current - Continuous | I_c | -600 | mA |
| Collector Power Dissipation | P_c | 150 | mW |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 to 150 | |

PNP Transistors

MMST2907A (MMST2907A)

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|--|------|-----|------|------|
| Collector- base breakdown voltage | V _{CBO} | I _C = -100 μA, I _E = 0 | -60 | | | V |
| Collector- emitter breakdown voltage | V _{CEO} | I _C = -10 mA, I _B = 0 | -60 | | | |
| Emitter - base breakdown voltage | V _{EBO} | I _E = -100 μA, I _C = 0 | -5 | | | |
| Collector-base cut-off current | I _{CBO} | V _{CB} = -50 V, I _E = 0 | | | -100 | nA |
| Collector-emitter cut-off current | I _{CES} | V _{CB} =-30V, I _B =0 | | | -100 | |
| Emitter cut-off current | I _{EBO} | V _{EB} = -3V, I _C =0 | | | -100 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =-150 mA, I _B =-15mA | | | -0.4 | V |
| | | I _C = -500 mA, I _B = -50mA | | | -1.6 | |
| Base - emitter saturation voltage | V _{BE(sat)} | I _C =-150 mA, I _B =-15mA | -0.6 | | -1.3 | |
| | | I _C = -500 mA, I _B = -50mA | | | -2.6 | |
| DC current gain | h _{FE(1)} | V _{CE} = -10V, I _C =- 0.1mA | 75 | | | |
| | h _{FE(2)} | V _{CE} = -10V, I _C = -1mA | 100 | | | |
| | h _{FE(3)} | V _{CE} = -10V, I _C =- 10mA | 100 | | | |
| | h _{FE(4)} | V _{CE} = -10V, I _C = -150mA | 100 | | 300 | |
| | h _{FE(5)} | V _{CE} = -10V, I _C = -500mA | 50 | | | |
| Delay time | t _d | V _{CC} =-30V, V _{BE(off)} = 1.5V, I _C =150mA I _{B1} =- 15mA | | | 10 | nS |
| Rise time | t _r | | | | 40 | |
| Storage time | t _s | V _{CC} =-30V, I _C =-150mA, I _{B1} =-I _{B2} =-15mA | | | 80 | |
| Fall time | t _f | | | | 30 | |
| Emitter input capacitance | C _{ib} | V _{EB} = -2V, I _C = 0, f=1MHz | | | 30 | pF |
| Collector output capacitance | C _{ob} | V _{CB} = -10V, I _E = 0, f=1MHz | | | 8 | |
| Transition frequency | f _T | V _{CE} = -20V, I _C = -50mA, f=100MHz | 200 | | | MHz |

■ Marking

| | |
|---------|-----|
| Marking | K3F |
|---------|-----|