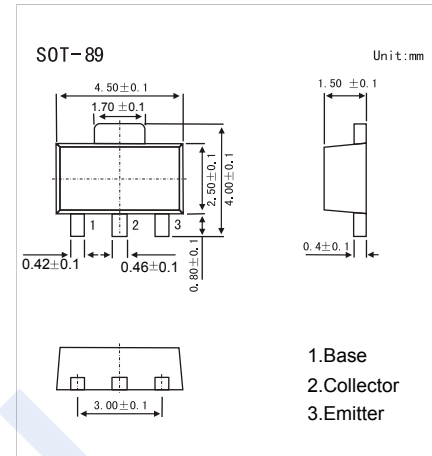


PNP Transistors

2SB1025

■ Features

- Low frequency power amplifier
- Complementary to 2SD1418



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|-----------------------------------|------------------|------------|------|
| Collector - Base Voltage | V _{CB0} | -120 | V |
| Collector - Emitter Voltage | V _{CEO} | -80 | |
| Emitter - Base Voltage | V _{EBO} | -5 | |
| Collector Current - Continuous | I _C | -1 | A |
| Collector current -Pulse (Note.1) | I _{CP} | -2 | |
| Collector Power Dissipation | P _C | 1 | W |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature range | T _{stg} | -55 to 150 | |

Note.1: PW ≤ 10ms,Duty cycle ≤ 20%

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|--|------|-----|------|------|
| Collector- base breakdown voltage | V _{CB0} | I _C = -100 μA, I _E = 0 | -120 | | | V |
| Collector- emitter breakdown voltage | V _{CEO} | I _C = -1 mA, R _{BE} = ∞ | -80 | | | |
| Emitter - base breakdown voltage | V _{EBO} | I _E = -100 μA, I _C = 0 | -5 | | | |
| Collector-base cut-off current | I _{CB0} | V _{CB} = -100V, I _E = 0 | | | -10 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} = -5V, I _C = 0 | | | -0.1 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = -500mA, I _B = -50mA | | | -1 | V |
| Base - emitter saturation voltage | V _{BE(sat)} | I _C = -500 mA, I _B = -50mA | | | -1.2 | |
| Base - emitter voltage | V _{BE} | V _{CE} = -5V, I _C = -150 mA | | | -0.9 | |
| DC current gain | h _{FE} | V _{CE} = -5V, I _C = -150 mA | 60 | | 320 | |
| | | V _{CE} = -5V, I _C = -500 mA | 30 | | | |
| Collector output capacitance | C _{ob} | V _{CB} = -10V, I _E = 0, f = 1MHz | | 20 | | pF |
| Transition frequency | f _T | V _{CE} = -5V, I _C = -150mA | | 140 | | MHz |

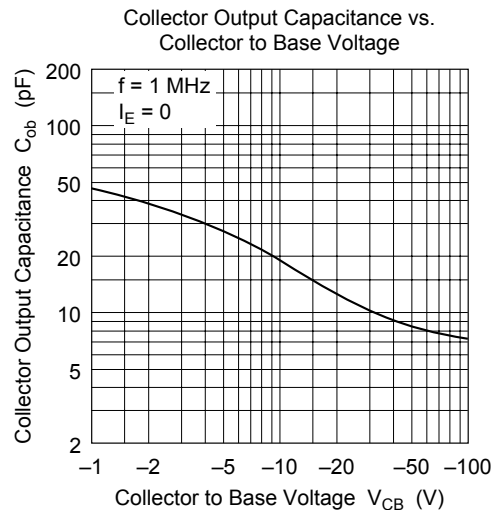
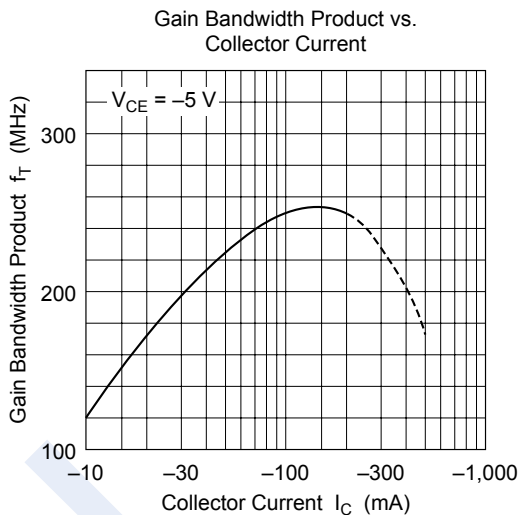
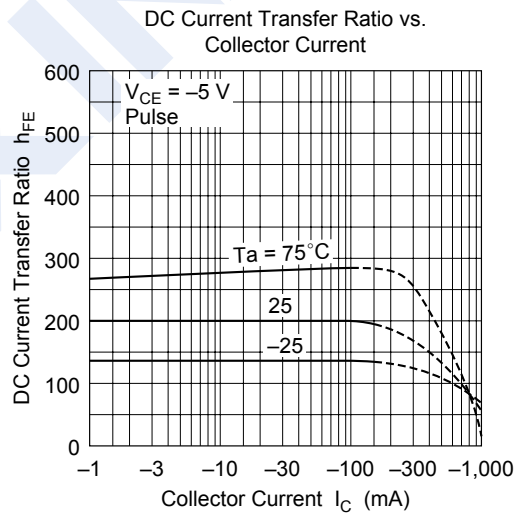
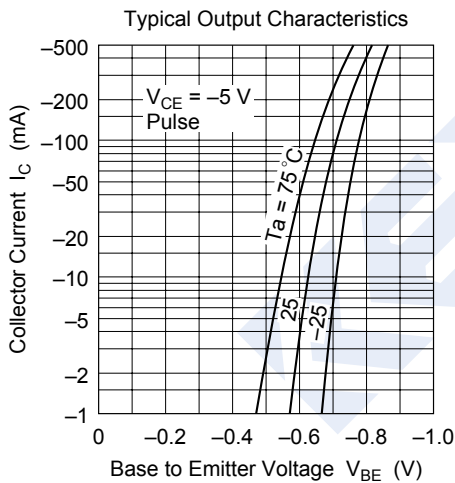
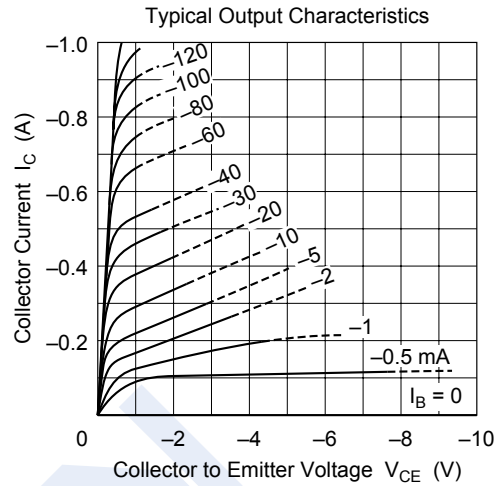
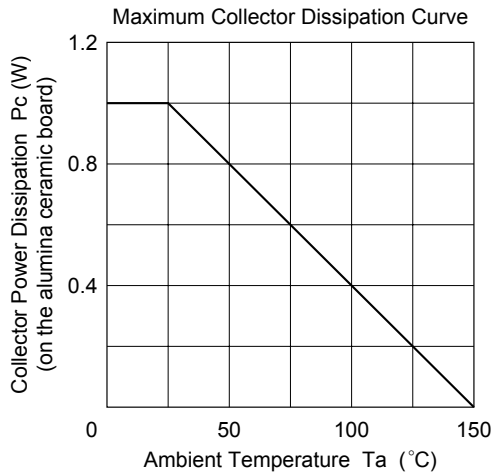
■ Classification of h_{fe}(1)

| Type | 2SB1025-H | 2SB1025-J | 2SB1025-K |
|---------|-----------|-----------|-----------|
| Range | 60-120 | 100-200 | 160-320 |
| Marking | DH | DJ | DK |

PNP Transistors

2SB1025

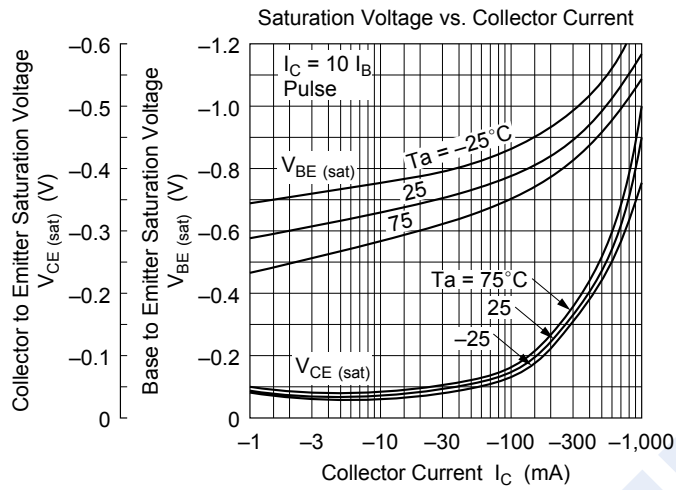
Typical Characteristics



PNP Transistors

2SB1025

■ Typical Characteristics



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