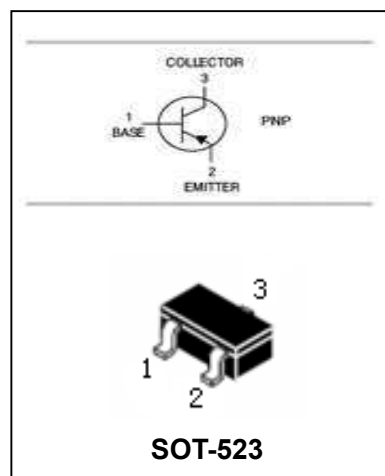


Plastic-Encapsulate Transistors

2SA1832

FEATURES

- High voltage and high current.
- Excellent h_{FE} linearity.
- High h_{FE} .
- Complementary to 2sc4738.
- Small package.



ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|----------|--------------|
| 2SA1832 | SO/SY/SG | SOT-523 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Symbol | Parameter | Limits | Unit |
|-----------|-----------------------------|-------------|------|
| V_{CBO} | collector-base voltage | -50 | V |
| V_{CEO} | collector-emitter voltage | -50 | V |
| V_{EBO} | emitter-base voltage | -5 | V |
| I_C | collector current | -150 | mA |
| I_B | Base current | -30 | mA |
| P_C | Collector power dissipation | 100 | mW |
| T_{stg} | storage temperature range | -55 to +125 | °C |
| T_j | junction temperature | 125 | °C |

Plastic-Encapsulate Transistors

2SA1832

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN. | Typ. | MAX. | UNIT |
|---------------|--------------------------------------|------------------------------|------|------|------|---------|
| $V_{(BR)CBO}$ | Collector-base breakown voltage | $I_C=-100\mu A, I_E=0$ | -50 | | | |
| $V_{(BR)CEO}$ | Collector- emitter breakown voltage | $I_C=-1\mu A, I_B=0$ | -50 | | | |
| $V_{(BR)BEO}$ | Emitter-base breakown voltage | $I_E=-100\mu A, I_C=0$ | -5 | | | |
| I_{CBO} | Collector cut-off current | $I_E=0, V_{CB}=-50V$ | | | -0.1 | μA |
| I_{EBO} | Emitter cut-off current | $I_C=0, V_{EB}=-5V$ | | | -0.1 | μA |
| $h_{FE(1)}$ | DC current gain | $V_{CE}=-6V, I_C=-2mA$ | 70 | | 400 | |
| $V_{CE(sat)}$ | collector-emitter saturation voltage | $I_C=-100mA, I_B=-10mA$ | | -0.1 | -0.3 | V |
| C_{obo} | Output capacitance | $I_E=0, V_{CB}=-10V, f=1MHz$ | | 4 | 7 | pF |
| f_T | transition frequency | $I_C=-1mA, V_{CE}=-10V,$ | 80 | | | MHz |

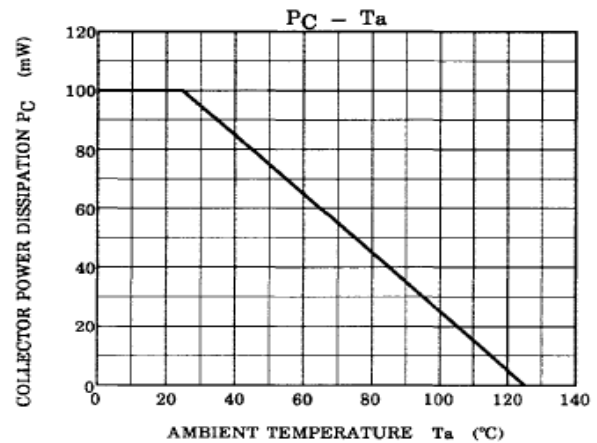
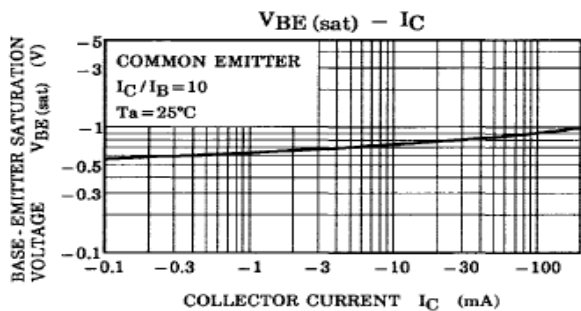
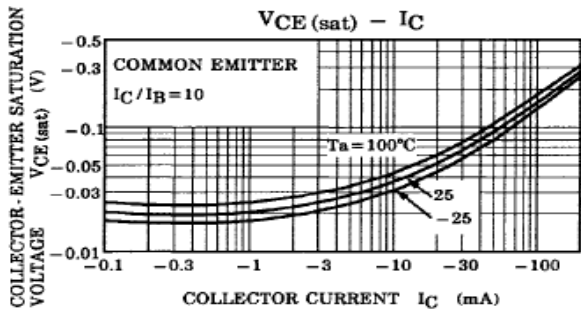
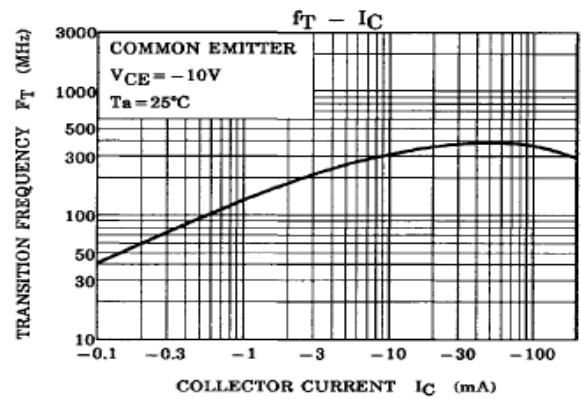
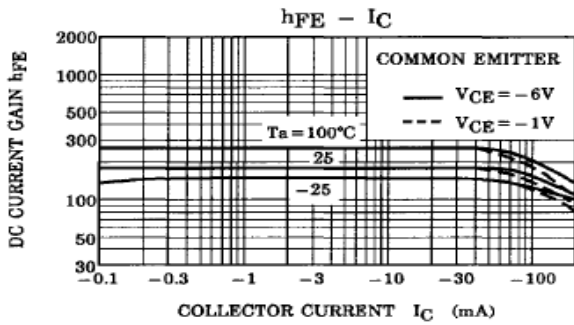
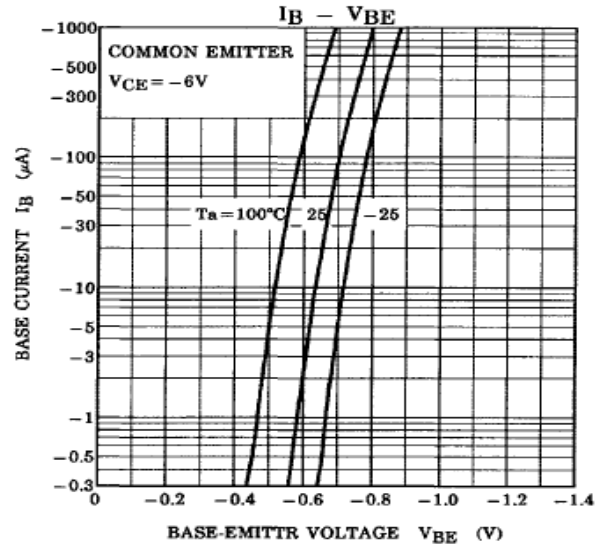
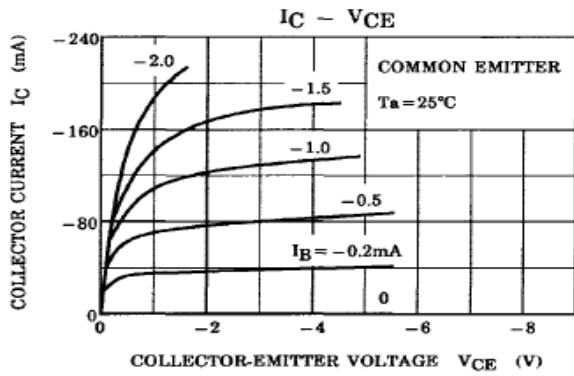
CLASSIFICATION OF $h_{FE(1)}$

| | | | |
|---------|--------|---------|---------|
| Rang | 70-140 | 120-240 | 200-400 |
| Marking | SO | SY | SG |

Plastic-Encapsulate Transistors

2SA1832

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



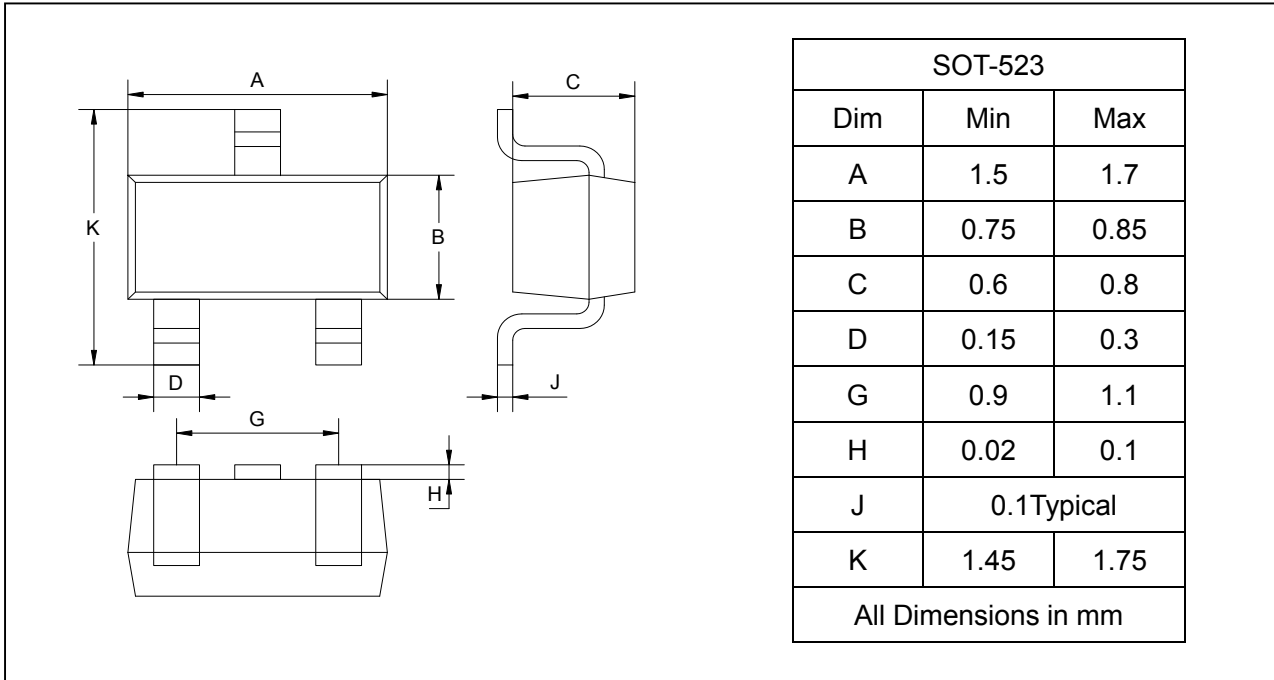
Plastic-Encapsulate Transistors

2SA1832

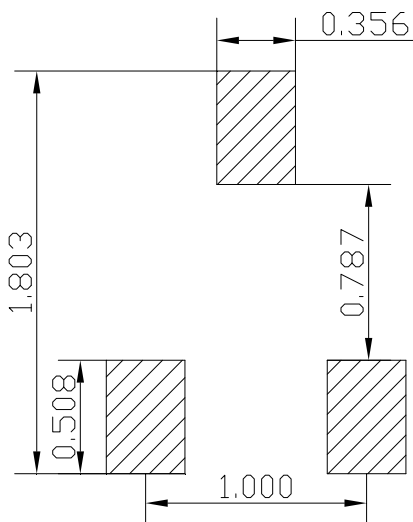
PACKAGE OUTLINE

Plastic surface mounted package

SOT-523



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

| Device | Package | Shipping |
|---------|---------|----------------|
| 2SA1832 | SOT-523 | 3000/Tape&Reel |