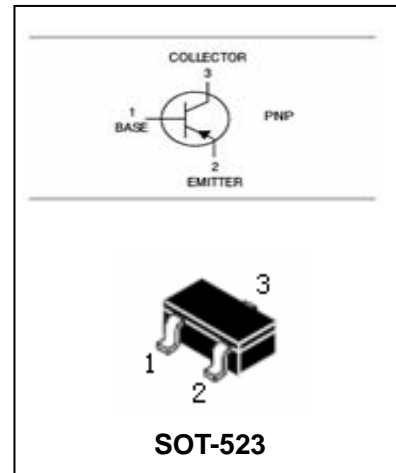


## Plastic-Encapsulate Transistors

## 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 | $\mu A$ |
| $I_{EBO}$     | Emitter cut-off current              | $I_C=0, V_{EB}=-5V$          |      |      | -0.1 | $\mu A$ |
| $h_{FE(1)}$   | 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     |

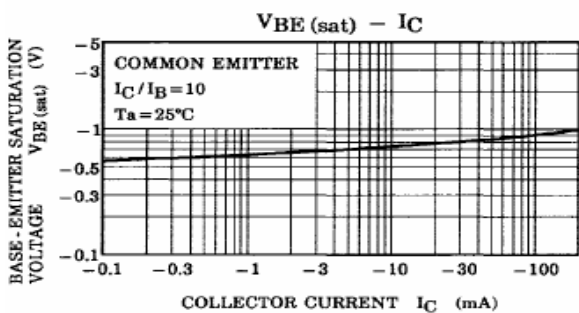
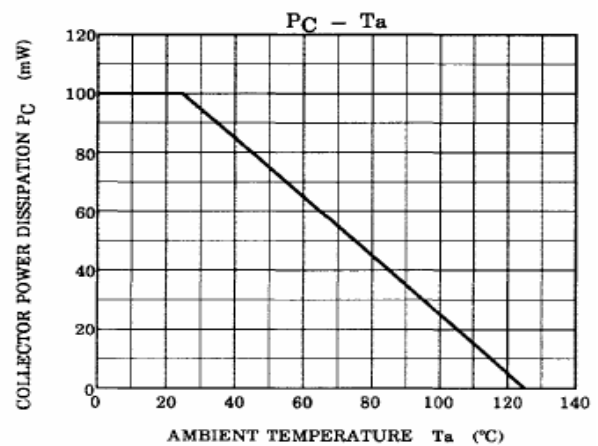
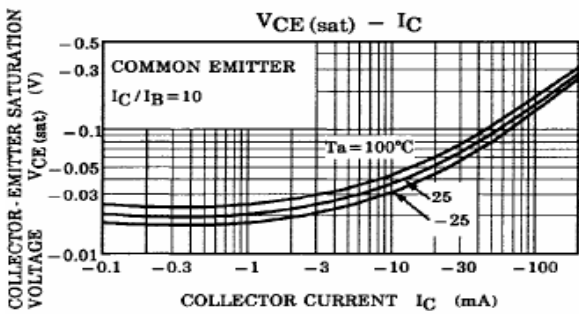
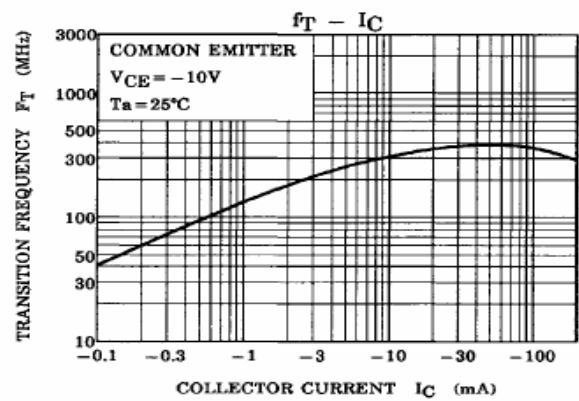
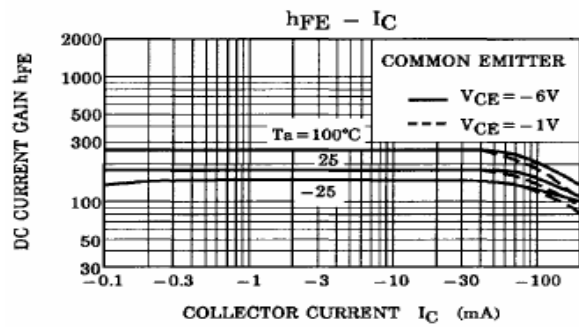
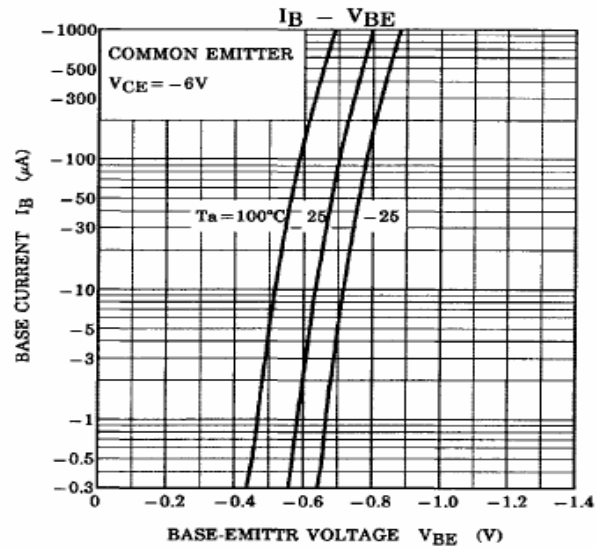
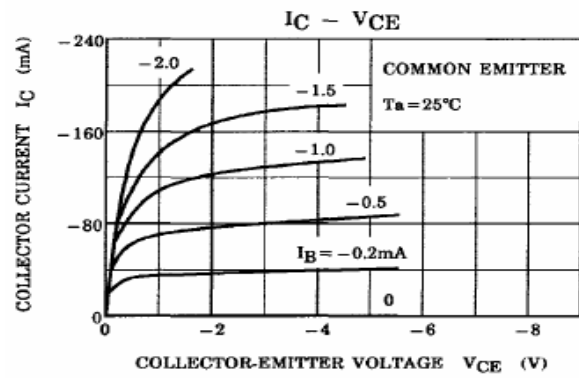
**CLASSIFICATION OF  $h_{FE(1)}$** 

|         |        |         |         |
|---------|--------|---------|---------|
| 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



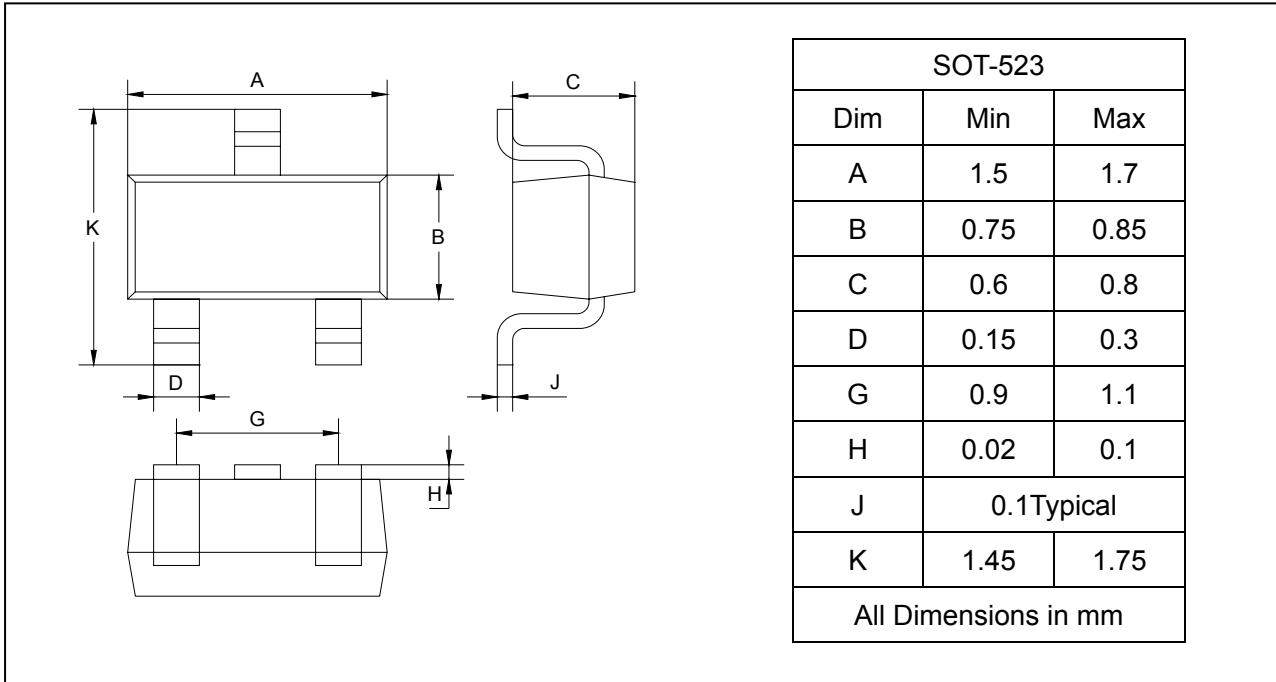
## Plastic-Encapsulate Transistors

## 2SA1832

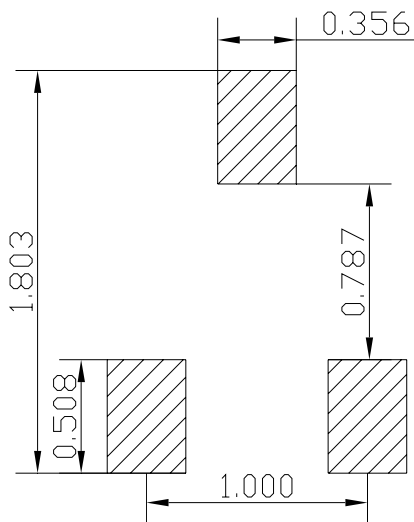
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-523



### SOLDERING FOOTPRINT



Unit : mm

### PACKAGE INFORMATION

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

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