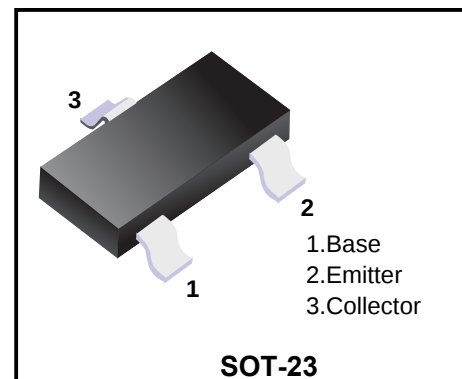


**NPN Transistors**

**FEATURES**

◆Complimentary to B772



**Marking Code**

**D882**

**D882**

**Absolute Maximum Ratings Ta = 25°C**

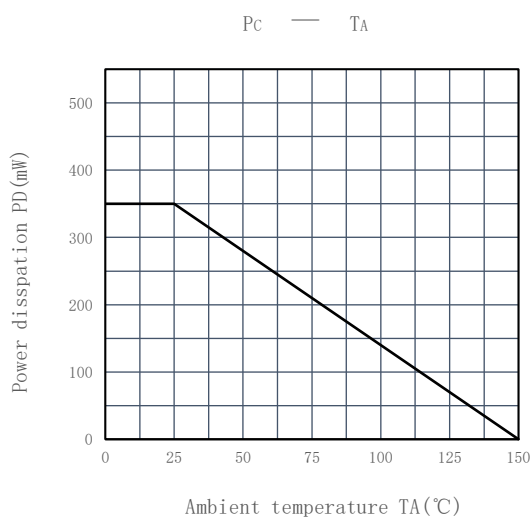
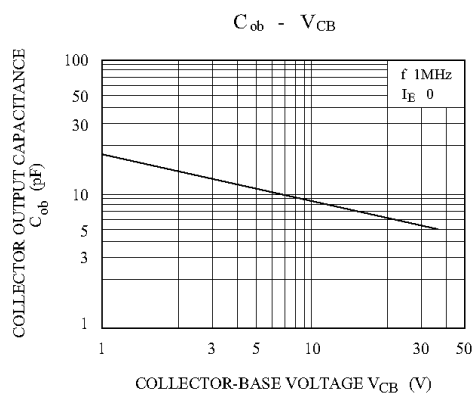
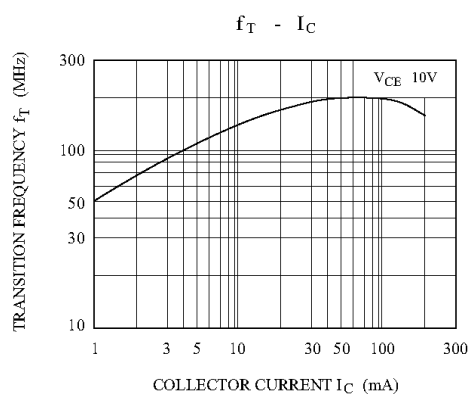
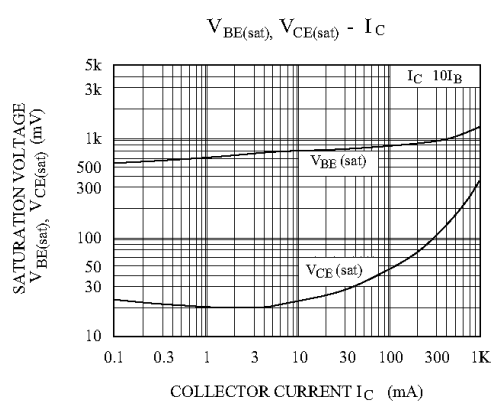
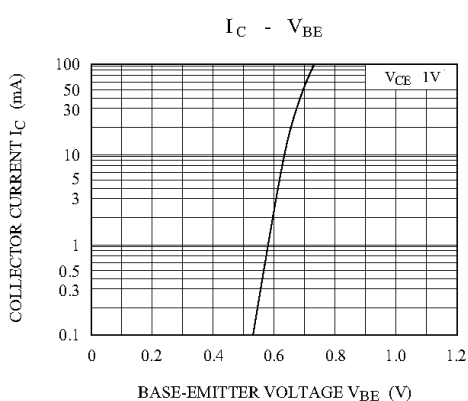
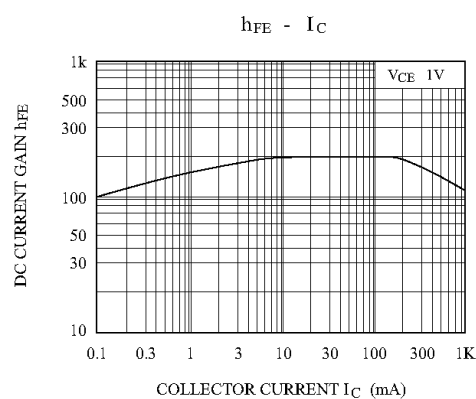
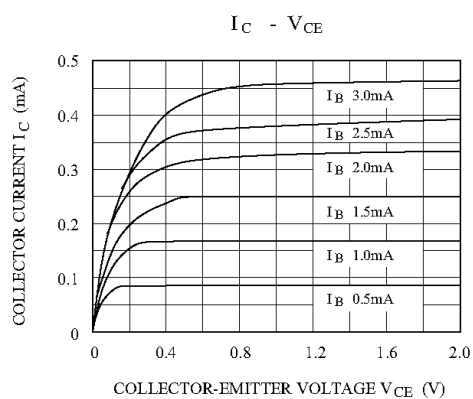
| Parameter                 | Symbol    | Value      | Unit |
|---------------------------|-----------|------------|------|
| Collector Base Voltage    | $V_{CBO}$ | 40         | V    |
| Collector Emitter Voltage | $V_{CEO}$ | 25         | V    |
| Emitter Base Voltage      | $V_{EBO}$ | 6          | V    |
| Collector Current         | $I_C$     | 1.5        | A    |
| Power Dissipation         | $P_D$     | 350        | mW   |
| Junction Temperature      | $T_J$     | 150        | °C   |
| Storage Temperature Range | $T_{STG}$ | -55 to 150 | °C   |

**Electrical Characteristics Ta = 25°C**

| Parameter                                                                                                                                  | Symbol        | Min.      | Typ. | Max.     | Unit |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------|------|----------|------|
| DC Current Gain<br>at $V_{CE} = 1\text{ V}$ , $I_C = 100\text{ mA}$ Current Gain Group<br>at $V_{CE} = 1\text{ V}$ , $I_C = 800\text{ mA}$ | $H_{FE}$      | 160<br>40 | -    | 320<br>- |      |
| Collector Base Cutoff Current<br>at $V_{CB} = 35\text{ V}$                                                                                 | $I_{CBO}$     | -         | -    | 100      | nA   |
| Emitter Base Cutoff Current<br>at $V_{EB} = 6\text{ V}$                                                                                    | $I_{EBO}$     | -         | -    | 100      | nA   |
| Collector Base Breakdown Voltage<br>at $I_C = 100\text{ }\mu\text{A}$                                                                      | $V_{(BR)CBO}$ | 40        | -    | -        | V    |
| Collector Emitter Breakdown Voltage<br>at $I_C = 2\text{ mA}$                                                                              | $V_{(BR)CEO}$ | 25        | -    | -        | V    |
| Emitter Base Breakdown Voltage<br>at $I_E = 100\text{ }\mu\text{A}$                                                                        | $V_{(BR)EBO}$ | 6         | -    | -        | V    |
| Collector Emitter Saturation Voltage<br>at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$                                                    | $V_{CE(sat)}$ | -         | -    | 0.5      | V    |
| Base Emitter Saturation Voltage<br>at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$                                                         | $V_{BE(sat)}$ | -         | -    | 1.2      | V    |
| Base Emitter Voltage<br>at $V_{CE} = 1\text{ V}$ , $I_B = 10\text{ mA}$                                                                    | $V_{BE(on)}$  | -         | -    | 1        | V    |
| Transition Frequency<br>at $V_{CE} = 10\text{ V}$ , $I_C = 50\text{ mA}$                                                                   | $F_T$         | 120       | -    | -        | MHz  |

**Classification of hfe**

|       |         |
|-------|---------|
| Type  | D882    |
| Range | 160-320 |



### Ordering information

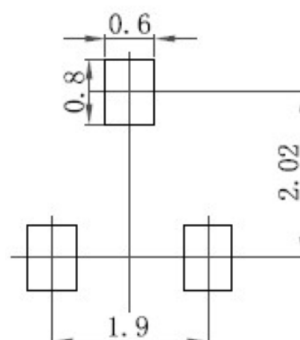
| Package | Packing Description | Base Quantity | Packing Quantity              |
|---------|---------------------|---------------|-------------------------------|
| SOT-23  | Tape/Reel, 7" reel  | 3000pcs/Reel  | 24000PCS/Box 120000PCS/Carton |

### Package Dimensions

#### SOT-23

| Dim. | Millimeter (mm) |      | mil  |      |
|------|-----------------|------|------|------|
|      | Min.            | Max. | Min. | Max. |
| A    | 0.9             | 1.15 | 35   | 45   |
| A1   | 0.1             |      | 3.9  |      |
| bp   | 0.38            | 0.48 | 15   | 19   |
| C    | 0.09            | 0.15 | 3.54 | 5.9  |
| D    | 2.8             | 3.0  | 110  | 118  |
| E    | 1.2             | 1.4  | 47   | 55   |
| E    | 1.9             |      | 75   |      |
| E1   | 0.95            |      | 37   |      |
| HE   | 2.1             | 2.55 | 83   | 100  |
| Lp   | 0.15            | 0.45 | 5.9  | 18   |
| Q    | 0.45            | 0.55 | 18   | 22   |
| v    | 0.2             |      | 7.9  |      |
| W    | 0.1             |      | 4    |      |

### The recommended mounting pad size



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