Elektronische Bauelemente

# PZT882J-C

**3A, 40V**

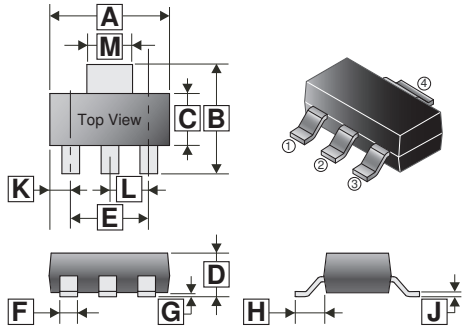
**NPN Silicon Medium Power Transistor**

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Collector-Emitter Saturation Voltage

**SOT-223**




## CLASSIFICATION OF $h_{FE}$

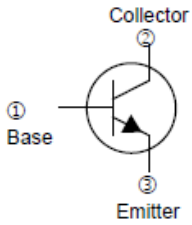
| Product-Rank | PZT882J-O-C | PZT882J-Y-C | PZT882J-GR-C |
|---|---|---|---|
| Range | 100~200 | 160~320 | 200~400 |

## MARKING

**D882**

## PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---|---|---|
| SOT-223 | 2.5K | 13 inch |




| REF. | Millimeter Min. | Millimeter Max. | REF. | Millimeter Min. | Millimeter Max. |
|---|---|---|---|---|---|
| A | 5.90 | 6.70 | G | - | 0.18 |
| B | 6.70 | 7.30 | H | 2.00 REF. | |
| C | 3.30 | 3.80 | J | 0.20 | 0.40 |
| D | 1.42 | 1.90 | K | 1.10 REF. | |
| E | 4.45 | 4.75 | L | 2.30 REF. | |
| F | 0.60 | 0.85 | M | 2.80 | 3.20 |

## ORDER INFORMATION

| Part Number | Type |
|---|---|
| PZT882J-O-C | Lead (Pb)-free and Halogen-free |
| PZT882J-Y-C | |
| PZT882J-GR-C | |

## ABSOLUTE MAXIMUM RATINGS ($T_A$=25℃ unless otherwise specified)

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | 40 | V |
| Collector-Emitter Voltage | $V_{CEO}$ | 30 | V |
| Emitter-Base Voltage | $V_{EBO}$ | 6 | V |
| Collector Current-Continuous | $I_C$ | 3 | A |
| Collector Dissipation | $P_C$ | 1.25 | W |
| Junction and Storage Temperature | $T_J$, $T_{STG}$ | -55~150 | ℃ |

## ELECTRICAL CHARACTERISTICS ($T_A$=25℃ unless otherwise specified)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | 40 | - | - | V | $I_C$=100μA, $I_E$=0 |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | 30 | - | - | V | $I_C$=10mA, $I_B$=0 |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | 6 | - | - | V | $I_E$=100μA, $I_C$=0 |
| Collector Cut-Off Current | $I_{CBO}$ | - | - | 1 | μA | $V_{CB}$=40V, $I_E$=0 |
| Collector Cut-Off Current | $I_{CEO}$ | - | - | 10 | μA | $V_{CE}$=30V, $I_B$=0 |
| Emitter Cut-Off Current | $I_{EBO}$ | - | - | 1 | μA | $V_{EB}$=6V, $I_C$=0 |
| DC Current Gain | $h_{FE}$ | 100 | - | 400 | | $V_{CE}$=2V, $I_C$=1A |
| | | 32 | - | - | | $V_{CE}$=2V, $I_C$=100mA |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | - | - | 0.5 | V | $I_C$=2A, $I_B$=200mA |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | - | - | 1.5 | V | $I_C$=2A, $I_B$=200mA |
| Transition Frequency | $f_T$ | - | 50 | - | MHz | $V_{CE}$=5V, $I_C$=100mA, f=10MHz |

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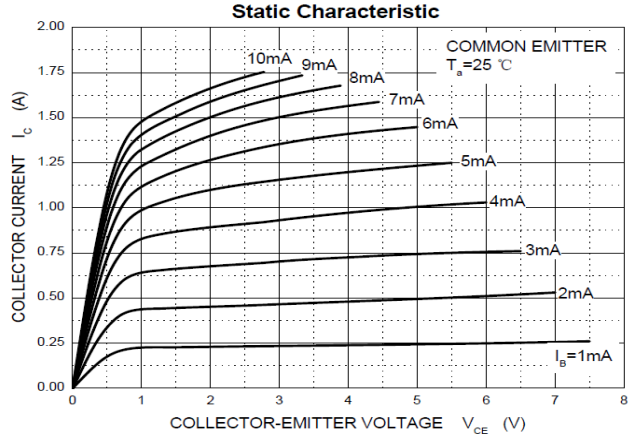
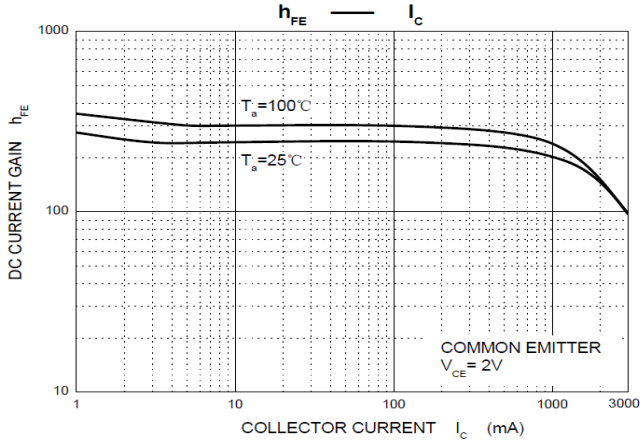
## CHARACTERISTIC CURVES

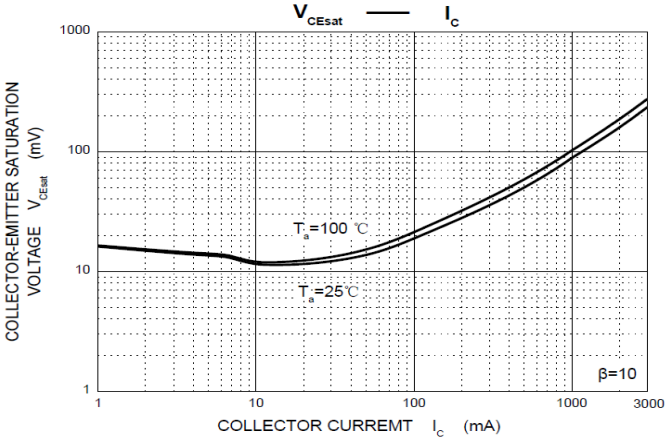
Static Characteristic



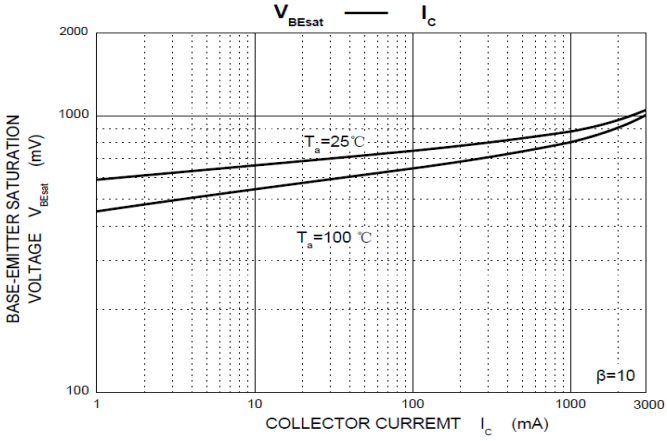

$h_{FE}$ —— $I_C$



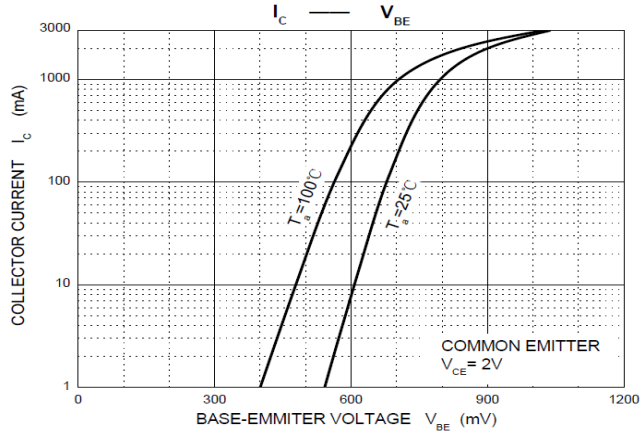

$V_{CEsat}$ —— $I_C$



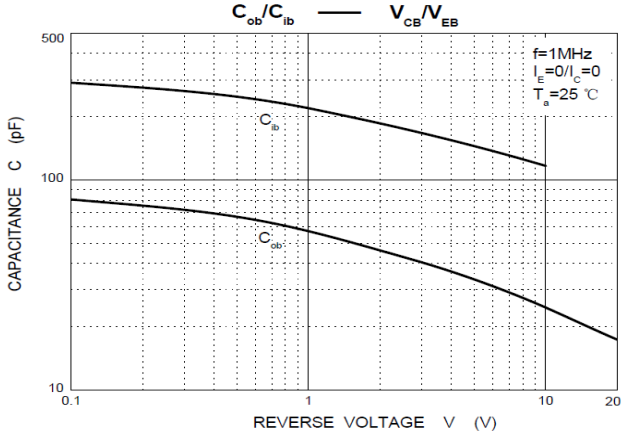

$V_{BEsat}$ —— $I_C$




$I_C$ —— $V_{BE}$




$C_{ob}/C_{ib}$ —— $V_{CB}/V_{EB}$




$P_C$ —— $T_a$