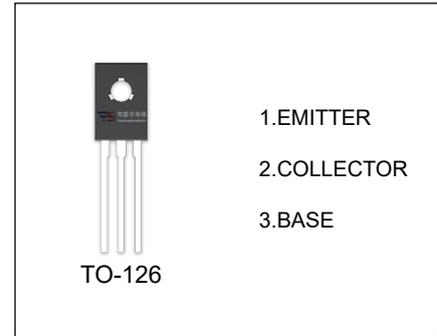


3DA882 TRANSISTOR (NPN)

FEATURES

- Low Speed Switching
- Complement to 3CA772



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| 3DA882 | TO-126 | Bulk | 200pcs/Bag |
| 3DA882-TU | TO-126 | Tube | 60pcs/Tube |

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------------|--|----------|-----------------------------|
| V_{CB0} | Collector-Base Voltage | 40 | V |
| V_{CEO} | Collector-Emitter Voltage | 30 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current | 3 | A |
| P_C | Collector Power Dissipation | 1.25 | W |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient | 100 | $^{\circ}\text{C}/\text{W}$ |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$ |

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

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|-----------------|---|-----|-----|-----|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=100\mu\text{A}, I_E=0$ | 40 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=10\text{mA}, I_B=0$ | 30 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=100\mu\text{A}, I_C=0$ | 6 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=40\text{V}, I_E=0$ | | | 10 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE}=30\text{V}, I_B=0$ | | | 10 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=6\text{V}, I_C=0$ | | | 10 | μA |
| DC current gain | h_{FE}^* | $V_{CE}=2\text{V}, I_C=1\text{A}$ | 60 | | 400 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}^*$ | $I_C=2\text{A}, I_B=0.2\text{A}$ | | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=2\text{A}, I_B=0.2\text{A}$ | | | 1.5 | V |
| Transition frequency | f_T | $V_{CE}=5\text{V}, I_C=0.1\text{A}, f=10\text{MHz}$ | 50 | | | MHz |

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycles $\leq 2.0\%$.

CLASSIFICATION OF h_{FE}

| RANK | R | O | Y | GR |
|-------|--------|---------|---------|---------|
| RANGE | 60-120 | 100-200 | 160-320 | 200-400 |