

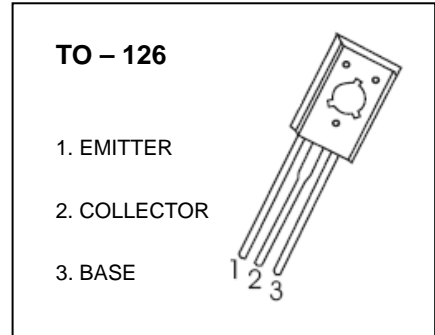


TO-126 Plastic-Encapsulate Transistors

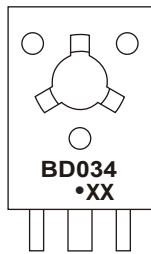
BD034 TRANSISTOR (PNP)

FEATURES

- High Transition Frequency
- High Collector Current

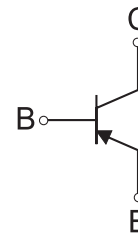


MARKING



BD034=Device code
Solid dot= Green molding compound device, if none, the normal device
XX=Code

Equivalent Circuit



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| BD034 | TO-126 | Bulk | 200pcs/Bag |
| BD034-TU | TO-126 | Tube | 60pcs/Tube |

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------------------------------|--|----------|------|
| V _{CBO} | Collector-Base Voltage | -110 | V |
| V _{CEO} | Collector-Emitter Voltage | -95 | V |
| V _{EBO} | Emitter-Base Voltage | -7 | V |
| I _C | Collector Current | -2.5 | A |
| P _C | Collector Power Dissipation | 1.25 | W |
| R _{θJA} | Thermal Resistance From Junction To Ambient | 100 | °C/W |
| T _J , T _{stg} | Operation Junction and Storage Temperature Range | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS

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

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---|------|-----|------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu\text{A}, I_E=0$ | -110 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-10\text{mA}, I_B=0$ | -95 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100\mu\text{A}, I_C=0$ | -7 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-100\text{V}, I_E=0$ | | | -1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-5\text{V}, I_C=0$ | | | -1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE}=-2\text{V}, I_C=-100\text{mA}$ | 100 | | 560 | |
| | $h_{FE(2)}$ | $V_{CE}=-2\text{V}, I_C=-1.5\text{A}$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-2\text{A}, I_B=-200\text{mA}$ | | | -0.5 | V |
| Base-emitter voltage | V_{BE} | $V_{CE}=-5\text{V}, I_C=-500\text{mA}$ | | | -1 | V |
| Transition frequency | f_T | $V_{CE}=-1\text{V}, I_C=-250\text{mA}, f=1\text{MHz}$ | 3 | | | MHz |

CLASSIFICATION OF $h_{FE(1)}$

| RANK | R | S | T | U |
|-------|---------|---------|---------|---------|
| RANGE | 100-200 | 140-280 | 200-400 | 280-560 |

TO-126 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|--------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 2.500 | 2.900 | 0.098 | 0.114 |
| A1 | 1.100 | 1.500 | 0.043 | 0.059 |
| b | 0.660 | 0.860 | 0.026 | 0.034 |
| b1 | 1.170 | 1.370 | 0.046 | 0.054 |
| c | 0.450 | 0.600 | 0.018 | 0.024 |
| D | 7.400 | 7.800 | 0.291 | 0.307 |
| E | 10.600 | 11.000 | 0.417 | 0.433 |
| e | 2.290 TYP | | 0.090 TYP | |
| e1 | 4.480 | 4.680 | 0.176 | 0.184 |
| h | 0.000 | 0.300 | 0.000 | 0.012 |
| L | 15.300 | 15.700 | 0.602 | 0.618 |
| L1 | 2.100 | 2.300 | 0.083 | 0.091 |
| P | 3.900 | 4.100 | 0.154 | 0.161 |
| Φ | 3.000 | 3.200 | 0.118 | 0.126 |