



BD237

NPN EPITAXIAL SILICON TRANSISTOR

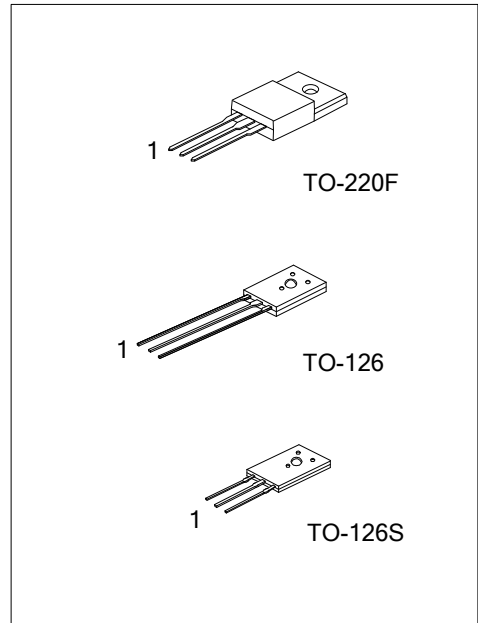
80V, NPN TRANSISTORS

DESCRIPTION

The UTC **BD237** is an NPN transistor. it uses UTC's advanced technology to provide customers with high collector-emitter breakdown voltage, etc.

FEATURES

- * Complement to UTC **BD238** respectively
- * High collector-emitter breakdown voltage



ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | Packing |
|-----------------|----------------|---------|----------------|---|---|---------|
| Lead Free | Halogen Free | | 1 | 2 | 3 | |
| BD237L-T60-K | BD237G-T60-K | TO-126 | E | C | B | Bulk |
| BD237L-T6S-K | BD237G-T6S-K | TO-126S | E | C | B | Bulk |
| BD237L-TF3-T | BD237G-TF3-T | TO-220F | E | C | B | Tube |
| BD237L-TF3-F-T | BD237G-TF3-F-T | TO-220F | B | C | E | Tube |

Note: Pin assignment: E: Emitter B: Base C: Collector

| | |
|---|---|
| <p>BD237L-TF3-F-K</p> <p>(1) Packing Type (2) Pin Assignment (3) Package Type (4) Green Package</p> | <p>(1) K: Bulk, T: Tube (2) refer to Pin Assignment (3) T60: TO-126, T6S: TO-126S, TF3: TO-220F (4) L: Lead Free, G: Halogen Free and Lead Free</p> |
|---|---|

MARKING

| TO-220F | TO-126 / TO-126S |
|--|--|
| <p>Pin Code ← UTC BD237 □ □ □ □ → L: Lead Free Lot Code ← → G: Halogen Free → Data Code</p> <p>1</p> | <p>UTC □ □ □ □ → Data Code BD237 □ → L: Lead Free → G: Halogen Free</p> <p>1</p> |

■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise noted)

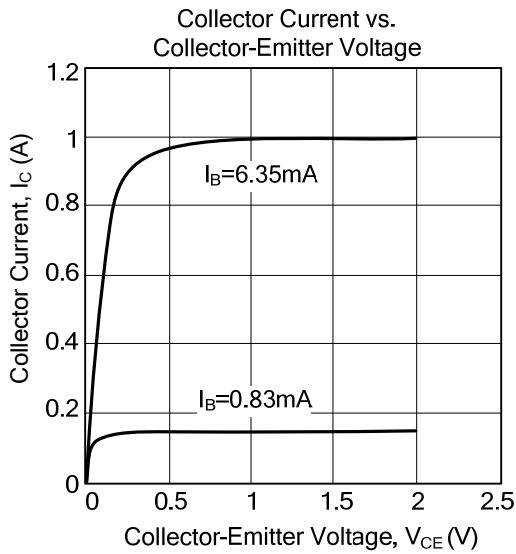
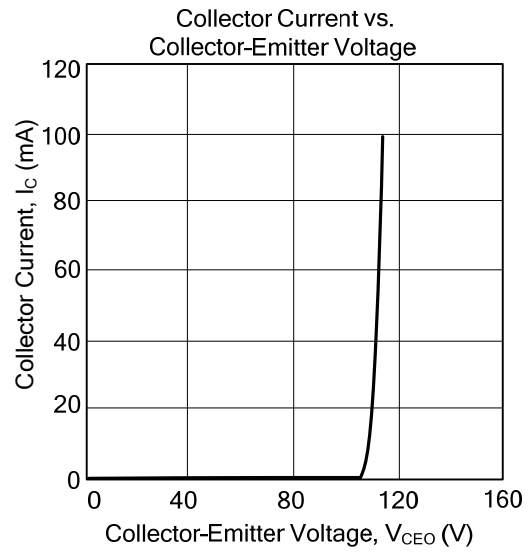
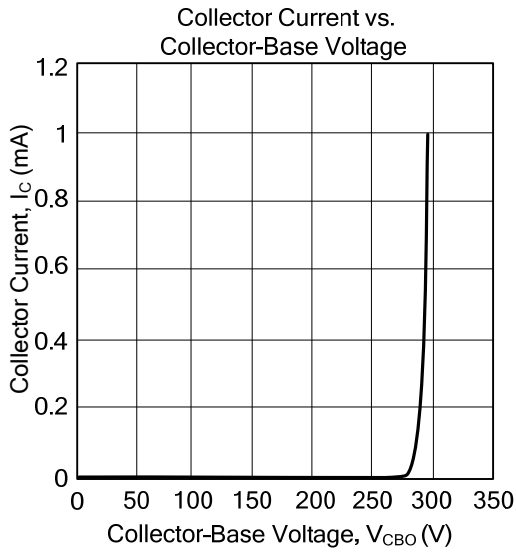
| PARAMETER | SYMBOL | RATINGS | UNIT |
|------------------------------|-----------------|------------|------------------|
| Collector-Base Voltage | V_{CBO} | 100 | V |
| Collector-Emitter Voltage | V_{CEO} | 80 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Continuous Collector Current | I_C | 2 | A |
| Collector Dissipation | TO-126/ TO-126S | 1.25 | W |
| | TO-220F | 1.6 | W |
| Junction Temperature | T_J | +150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -65 ~ +150 | $^\circ\text{C}$ |

Note: Absolute maximum ratings are stress ratings only and functional device operation is not implied. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---|-----|-----|-----|---------------|
| Collector-Base Breakdown Voltage | BV_{CBO} | $I_C=1\text{mA}, I_E=0$ | 100 | | | V |
| Collector-Emitter Breakdown Voltage | BV_{CEO} | $I_C=100\text{mA}, I_B=0$ | 80 | | | V |
| Emitter-Base Breakdown Voltage | BV_{EBO} | $I_E=1\text{mA}, I_C=0$ | 5 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=100\text{V}, I_E=0$ | | | 100 | μA |
| Emitter Cut-Off Current | I_{EBO} | $V_{EB}=5\text{V}, I_C=0$ | | | 1 | mA |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=1\text{A}, I_B=100\text{mA}$ | | | 0.6 | V |
| DC Current Gain | $h_{FE}(1)$ | $I_C=150\text{mA}, V_{CE}=2\text{V}$ | 40 | | | |
| | $h_{FE}(2)$ | $I_C=1\text{A}, V_{CE}=2\text{V}$ | 25 | | | |
| Transition Frequency | f_T | $I_C=250\text{mA}, V_{CE}=10\text{V}, f=10\text{MHz}$ | 3 | | | MHz |

■ TYPICAL CHARACTERISTICS



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