



## BD237

## NPN EPITAXIAL SILICON TRANSISTOR

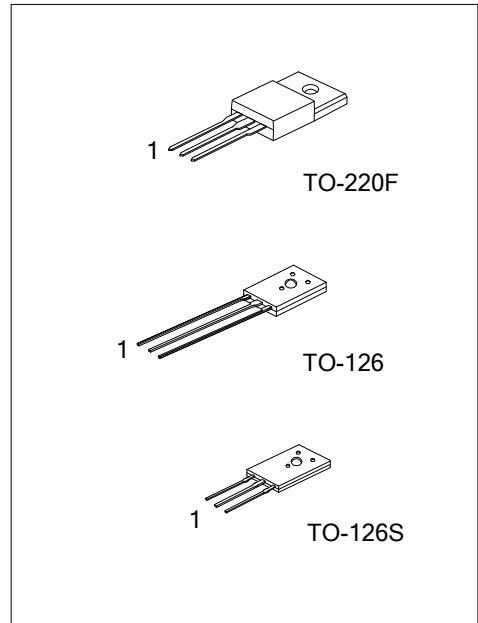
### 80V, NPN TRANSISTORS

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

TO-220F	TO-126 / TO-126S

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

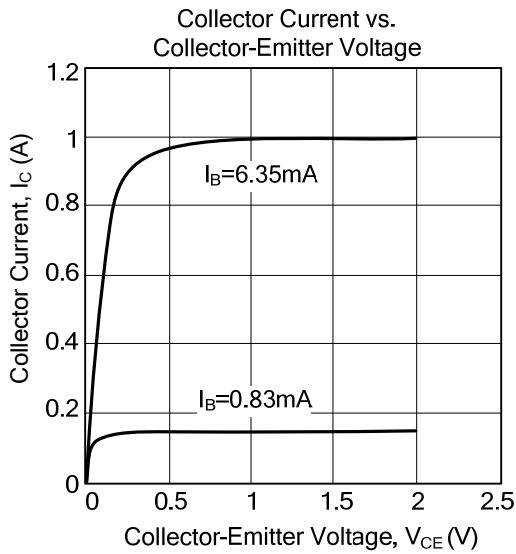
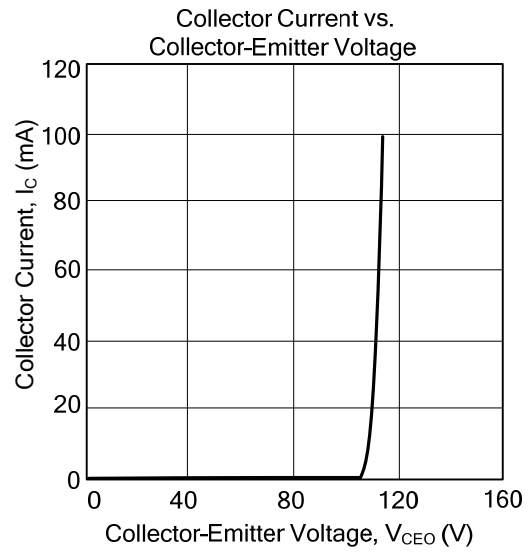
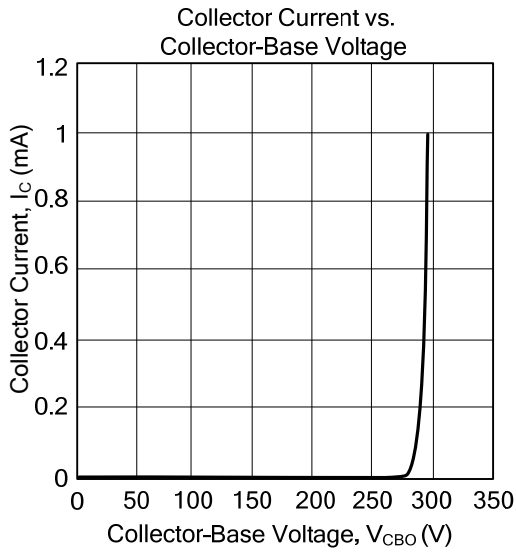
PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Continuous Collector Current	$I_C$	2	A
Collector Dissipation	TO-126/ TO-126S	1.25	W
	TO-220F	1.6	W
Junction Temperature	$T_J$	+150	$^\circ\text{C}$
Storage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