

UNISONIC TECHNOLOGIES CO., LTD

# **BD237**

PNP EPITAXIAL SILICON TRANSISTOR

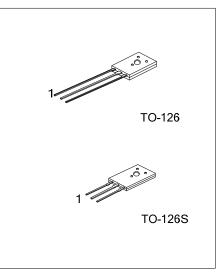
# **80V, NPN TRANSISTORS**

## DESCRIPTION

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

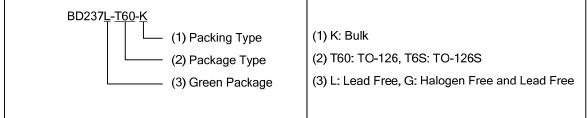
### FEATURES

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



### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing	
Lead Free	Halogen Free	Fackage	1	2	3	Facking	
BD237L-T60-K	BD237G-T60-K	TO-126	E	С	В	Bulk	
BD237L-T6S-K	S-K BD237G-T6S-K		E	С	В	Bulk	
Note: Pin assignment: E: Emitter B: Base C: Collector							



#### MARKING



# ■ **ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub>=25°C, unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT	
Collector-Base Voltage	V <sub>CBO</sub>	100	V	
Collector-Emitter Voltage	V <sub>CEO</sub>	80	V	
Emitter-Base Voltage	V <sub>EBO</sub>	5	V	
Continuous Collector Current	Ι <sub>C</sub>	2	А	
Collector Dissipation	Pc	1.25	W	
Junction Temperature	TJ	150	°C	
Storage Temperature Range	T <sub>STG</sub>	-65~150	°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.

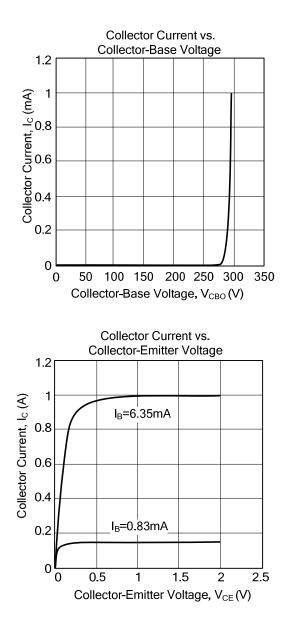
#### ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub> =25°C, unless otherwise specified)

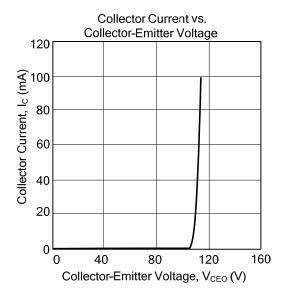
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CBO</sub>	$I_{C}=1mA$ , $I_{E}=0$	100			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =0	80			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	$I_E=1mA$ , $I_C=0$	5			V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =100V, I <sub>E</sub> =0			100	μA
Emitter Cut-Off Current	I <sub>EBO</sub>	$V_{EB}=5V, I_{C}=0$			1	mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =100mA			0.6	V
DC Current Gain	h <sub>FE</sub> (1)	I <sub>C</sub> =150mA,V <sub>CE</sub> =2V	40			
DC Current Gain	h <sub>FE</sub> (2)	I <sub>C</sub> =1A,V <sub>CE</sub> =2V	25			
Transition Frequency	f⊤	$I_C$ =250mA, $V_{CE}$ =10V, f=10MHz	3			MHz



# NPN EPITAXIAL SILICON TRANSISTOR

# TYPICAL CHARACTERISTICS





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