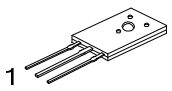
BD238

PNP EPITAXIAL SILICON TRANSISTOR

-80V, PNP TRANSISTOR



TO-126S

■ DESCRIPTION

The UTC **BD238** is a PNP epitaxial planar transistor, it uses UTC's advanced technology to provide the customers with high DC current gain and high collector-emitter breakdown voltage, etc.

■ FEATURES

* High DC current gain
* High collector-emitter breakdown voltage

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BD238L-T6S-K	BD238G-T6S-K	TO-126S	E	C	B	Bulk

BD238L-T6S-K

(1) Packing Type
(2) Package Type
(3) Lead Free

(1) K: Bulk
(2) T6S: TO-126S
(3) L: Lead Free, G: Halogen Free

BD238

PNP EPITAXIAL SILICON TRANSISTOR

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

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
Collector Current	I_C	-2	A
Collector Power Dissipation	Pc	1.25	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55~150	°C

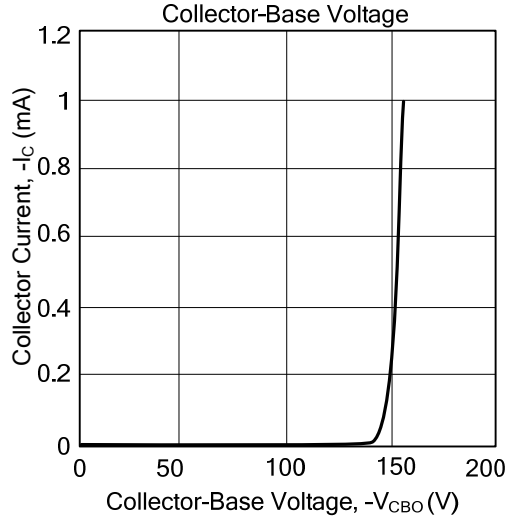
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

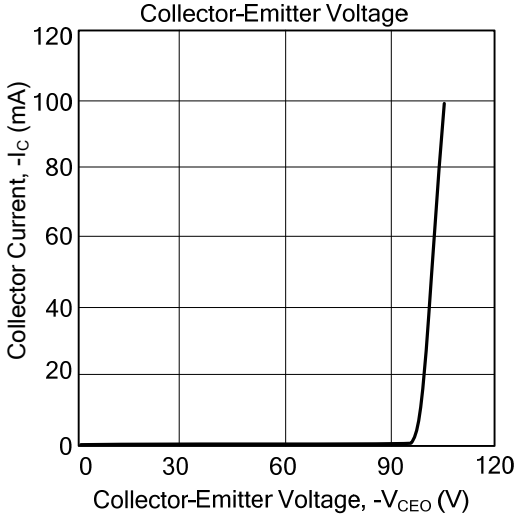
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=-1mA, I_E=0	-100			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-100mA, I_B=0	-80			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_C=-1mA, I_E=0	-5			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-100V,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

■ TYPICAL CHARACTERISTICS

Collector Current vs.
Collector-Base Voltage



Collector Current vs.
Collector-Emitter Voltage



Collector Current vs.
Collector-Emitter Voltage