

Descriptions

- General purpose application
- Switching application

Features

- High voltage : $V_{CE0}=30V$
- Complementary pair with BC858U

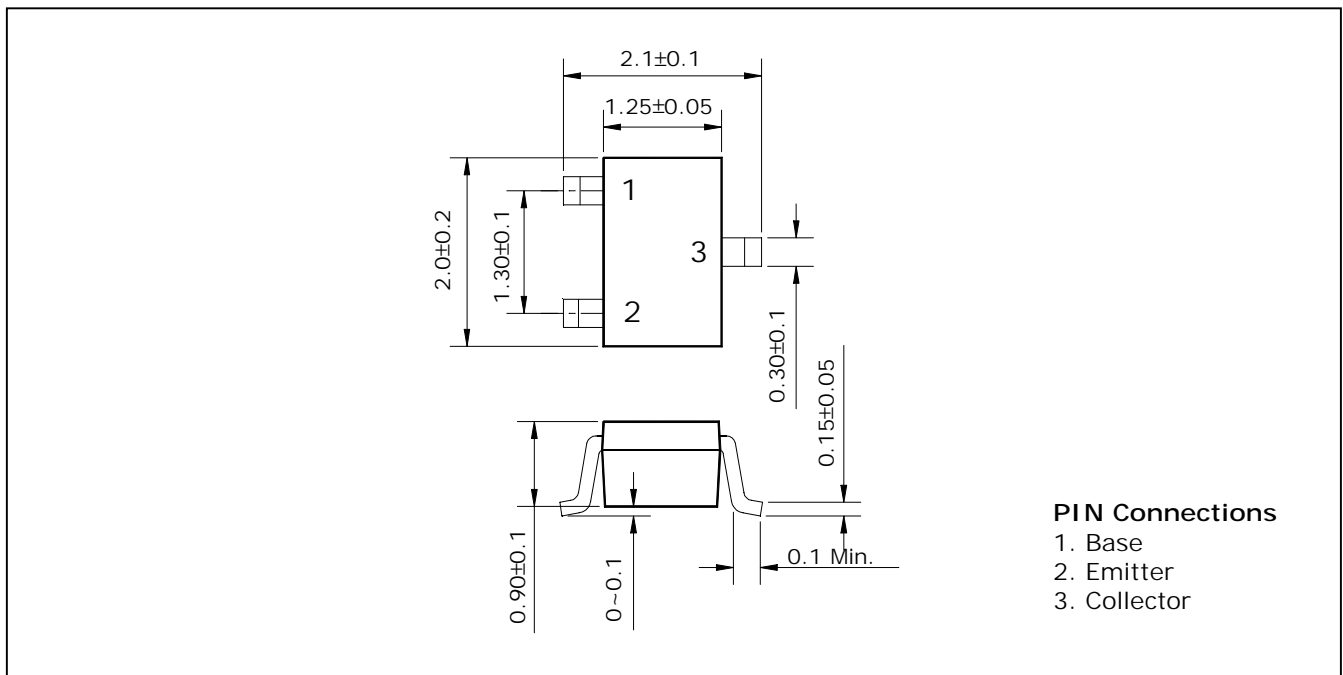
Ordering Information

Type NO.	Marking	Package Code
BC848U	BS□	SOT-323

□ : h_{FE} rank

Outline Dimensions

unit : mm



Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	30	V
Collector-Emitter voltage	V_{CEO}	30	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	BV_{CEO}	$I_C=1mA, I_B=0$	30	-	-	V
Base-Emitter turn on voltage	$V_{BE(ON)}$	$V_{CE}=5V, I_C=2mA$	550	-	700	mV
Base-Emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=5mA$	-	900	-	mV
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=5mA$	-	-	600	mV
Collector cut-off current	I_{CBO}	$V_{CB}=35V, I_E=0$	-	-	15	nA
DC current gain	h_{FE}^*	$V_{CE}=5V, I_C=2mA$	110	-	800	-
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA$	-	150	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4.5	pF
Noise figure	NF	$V_{CE}=5V, I_C=200\mu A, f=1KHz, R_g=2K\Omega$	-	-	10	dB

* : h_{FE} rank / A : 110 ~ 220, B : 200 ~ 450, C : 420 ~ 800

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

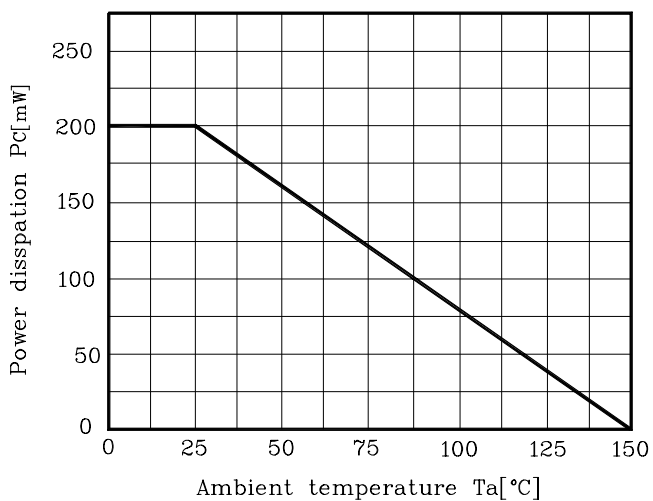


Fig. 2 $I_C - V_{BE}$

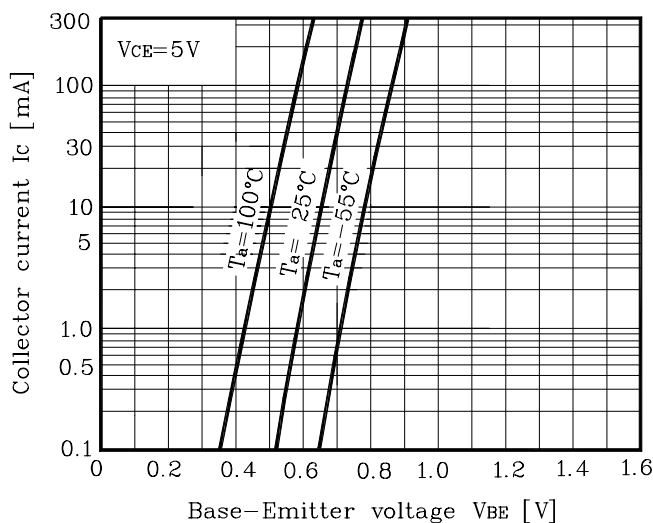


Fig. 3 $I_C - V_{CE}$

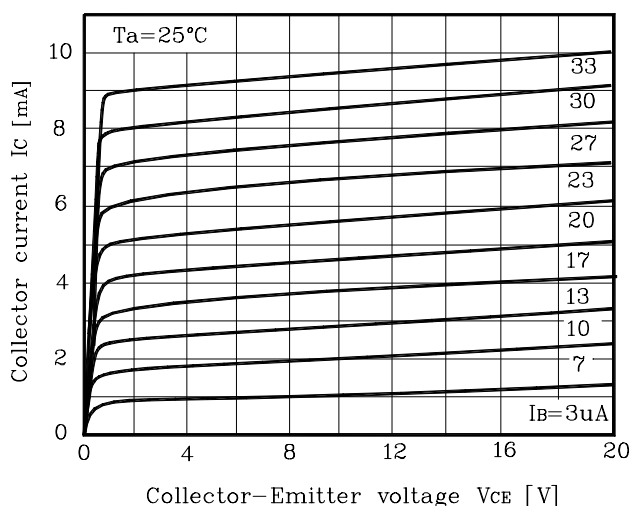


Fig. 4 $h_{FE} - I_C$

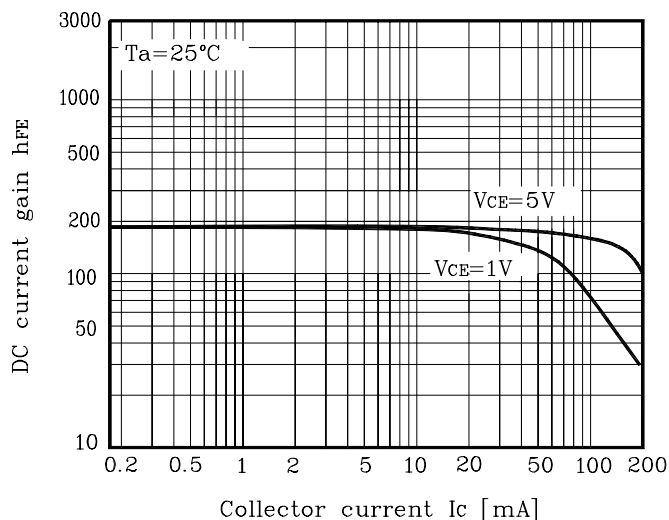
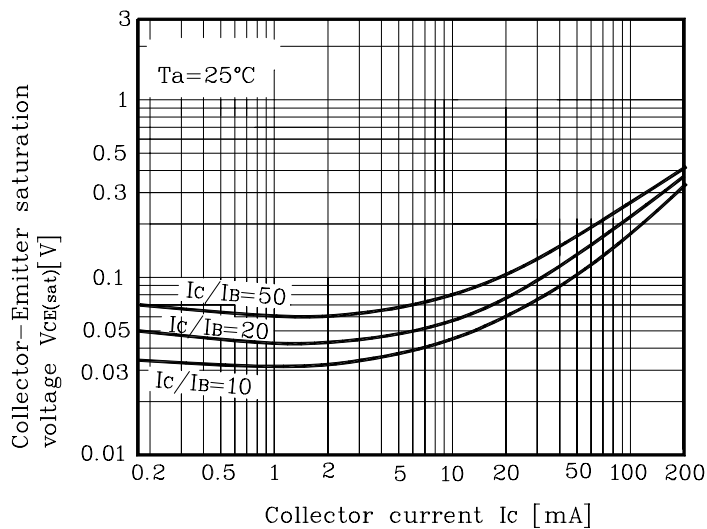


Fig. 5 $V_{CE(sat)} - I_C$





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.