



Micro Commercial Components



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BC857BV

PNP Plastic-Encapsulate Transistors

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Epitaxial Die Construction
- Complementary NPN Type Available (BC847BV)
- Ultra-small Surface Mount Package
- Marking:K5V

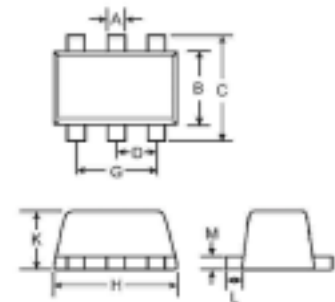
Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{CBO}	Collector-Base Voltage	-50	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current-Continuous	-0.1	A
P _C	Collector Dissipation	0.15	W
R ^θ _{JA}	Thermal Resistance Junction to Ambient	833	°C/W
T _J	Operating Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

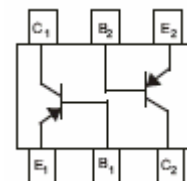
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =-10mA, I _B =0)	-45	---	---	Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-10mA, I _E =0)	-50	---	---	Vdc
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =-1mA, I _C =0)	-6	---	---	Vdc
I _{CBO}	Collector Cutoff Current (V _{CB} =-30Vdc, I _E =0Vdc)	---	---	-15	nA
h _{FE}	DC Current Gain (I _C =-2mA, V _{CE} =-5Vdc)	200	---	475	---
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =-10mA, I _B =-0.5mA) (I _C =-100mA, I _B =-5mA)	---	---	-0.1 -0.4	Vdc
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =-10mA, I _B =-0.5mA) (I _C =-100mA, I _B =-5mA)	---	-0.7 -0.9	---	Vdc
V _{BE}	Base-Emitter Voltage (I _C =-2mA, V _{CE} =-5Vdc) (I _C =-10mA, V _{CE} =-5Vdc)	-0.6 ---	---	-0.75 -0.82	Vdc
f _T	Transition Frequency (V _{CE} =-5Vdc, I _C =-10mA, f=100MHz)	100	---	---	MHz
C _{ob}	Output Capacitance (V _{CB} =-10Vdc, f=1.0MHz, I _E =0)	---	---	4.5	pF
NF	Noise Figure (V _{CE} =-5V, I _C =-0.2mA, f=1KHz, R _S =2kΩ, BW=200Hz)	---	---	10	dB

SOT-563



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.006	.011	0.15	0.30	
B	.043	.049	1.10	1.25	
C	.061	.067	1.55	1.70	
D	.020		0.50		
G	.035	.043	0.90	1.10	
H	.059	.067	1.50	1.70	
K	.022	.023	0.56	0.60	
L	.004	.011	0.10	0.30	
M	.004	.007	0.10	0.18	



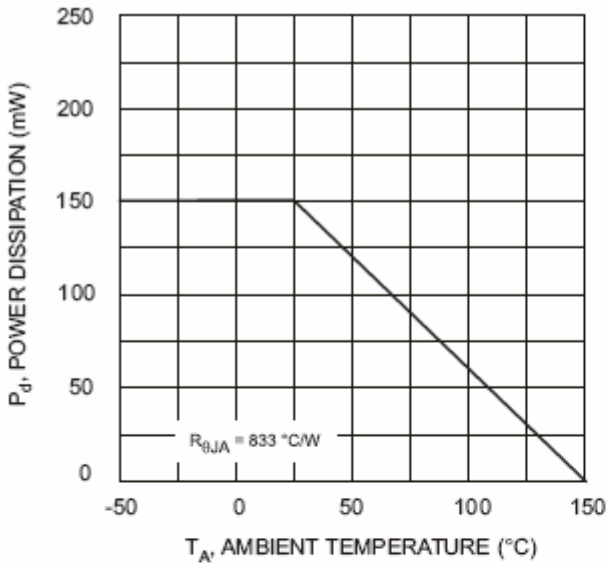


Fig. 1 Derating Curve - Total

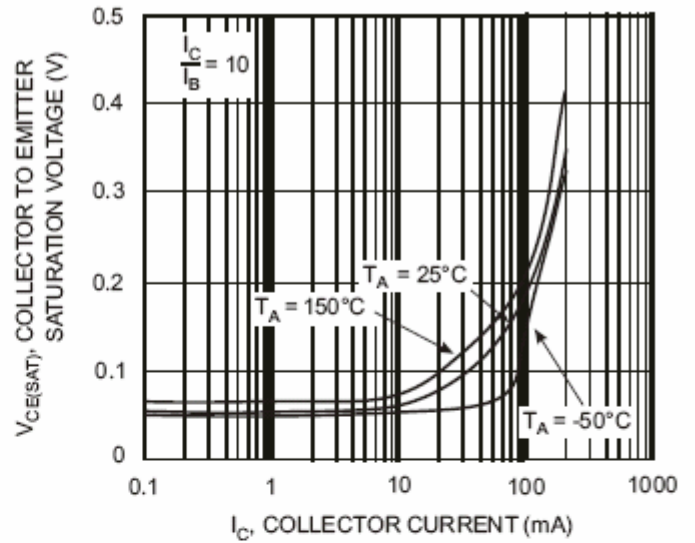


Fig. 2 Collector Emitter Saturation Voltage vs. Collector Current

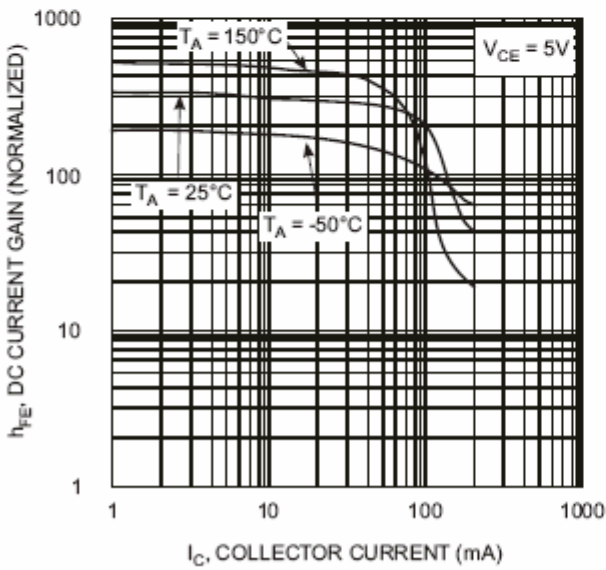


Fig. 3, DC Current Gain vs. Collector Current

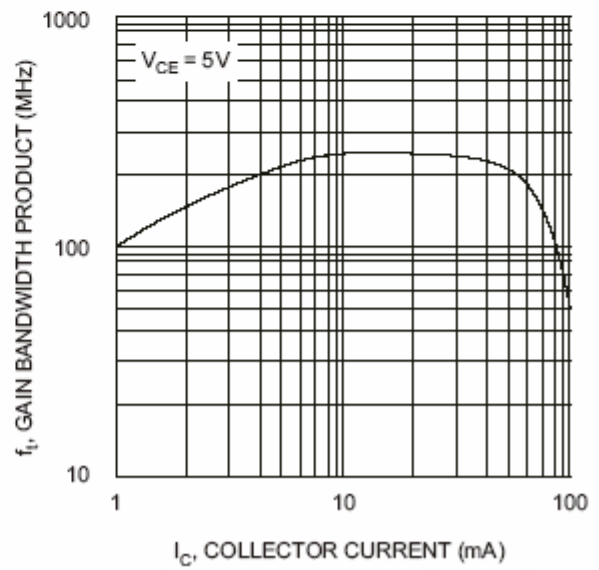


Fig. 4, Gain Bandwidth Product vs Collector Current



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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