



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

BC847BV

Features

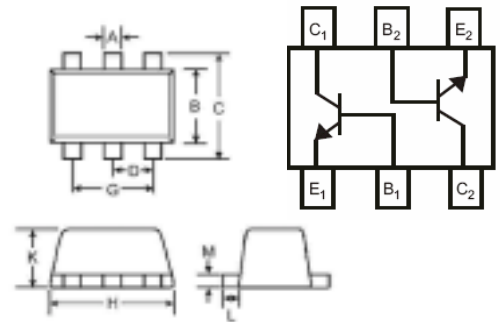
- Epitaxial Die Construction
- Complementary PNP Type Available (BC857BV)
- Ultra-small Surface Mount Package
- Lead Free Plating
- Marking:K4V
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

NPN Plastic-Encapsulate Transistors

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	6	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

SOT-563



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	nAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =5Vdc, I _C =0Vdc)	---	---	100	nAdc
h _{FE}	DC Current Gain (I _C =2mA, V _{CE} =5Vdc)	200	---	450	---
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =10mA, I _B =0.5mA) (I _C =100mA, I _B =5mA)	---	---	100 300	mVdc
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =10mA, I _B =0.5mA) (I _C =100mA, I _B =5mA)	---	700 900	---	mVdc
V _{BE}	Base-Emitter Voltage (I _C =2mA, V _{CE} =5Vdc) (I _C =10mA, V _{CE} =5Vdc)	580	660	700 770	mVdc
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, BW=200Hz, f=1KHz, R _S =2kΩ)	---	---	10	dB

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	

BC847BV

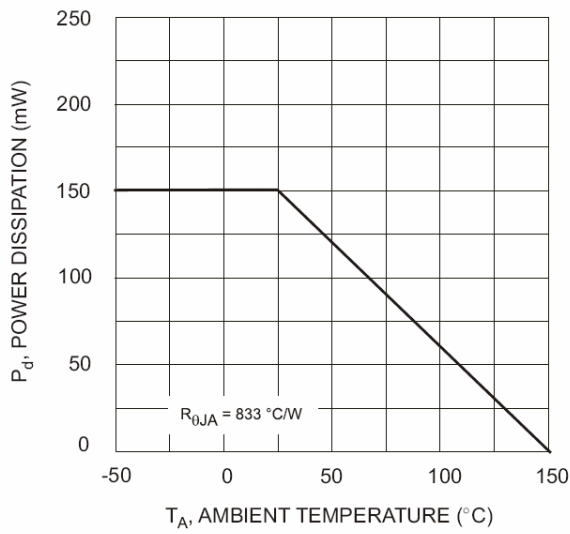


Fig. 1, Derating Curve - Total

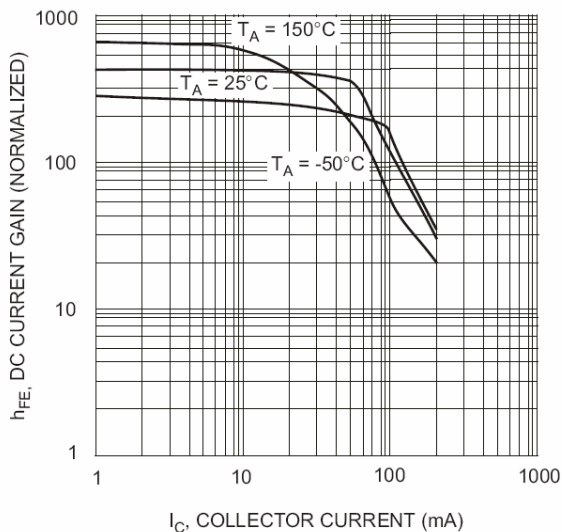


Fig. 3, DC Current Gain vs Collector Current

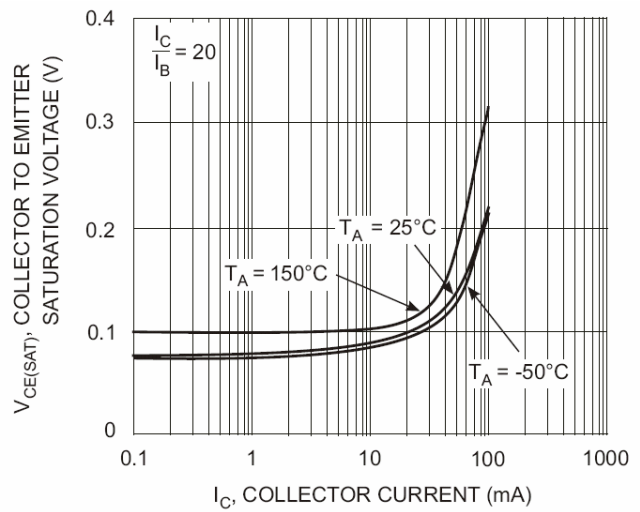


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

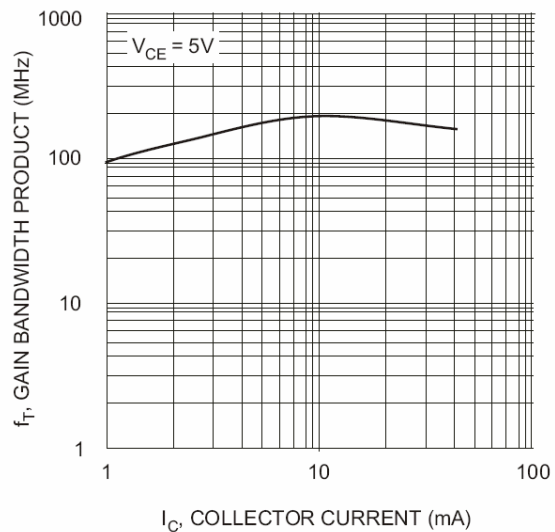


Fig. 4, Gain Bandwidth Product vs Collector Current



Micro Commercial Components

Ordering Information

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.