secos

Elektronische Bauelemente

BC847BV

Dual NPN Transistors

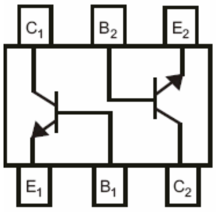
Plastic-Encapsulate Transistors

RoHS Compliant Product

FEATURES

- Epitaxial Die Construction
- Complementary PNP Type Available (BC857BV)
- Ultra-Small Surface Mount Package

Marking:K4V



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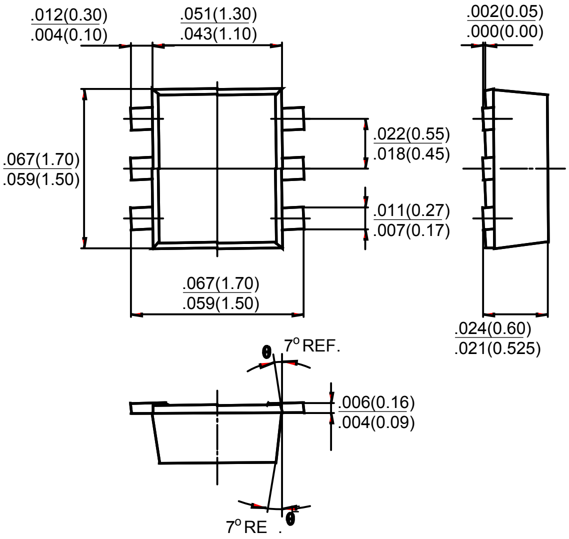

Dimensions in inches and (millimeters)

MAXIMUM RATINGS* T_A=25.   unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	0.1	A
P_C	Collector Dissipation	0.15	W
$R_{\theta}JA$	Thermal Resistance. Junction to Ambient Air	833	°C/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25   unless otherwise   specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			15	nA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			100	nA
DC current gain	$h_{FE(1)}$	V_{CE}=5V,I_C=2mA	200		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA,I_B=0.5mA I_C=100mA,I_B=5mA			100 300	mV
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA,I_B=0.5mA I_C=100mA,I_B=5mA		700 900		mV
Base-emitter voltage	V_{BE}	V_{CE}=5V,I_C=2mA V_{CE}=5V,I_C=10mA	580	660	700 770	mV
Transition frequency	f_T	V_{CE}=5V,I_C=10mA,f=100MHz	100			MHz
Output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			4.5	pF
Noise Figure	NF	V_{CE}=5V,Rs=2kΩ, f=1kHz,BW=200Hz			10	dB

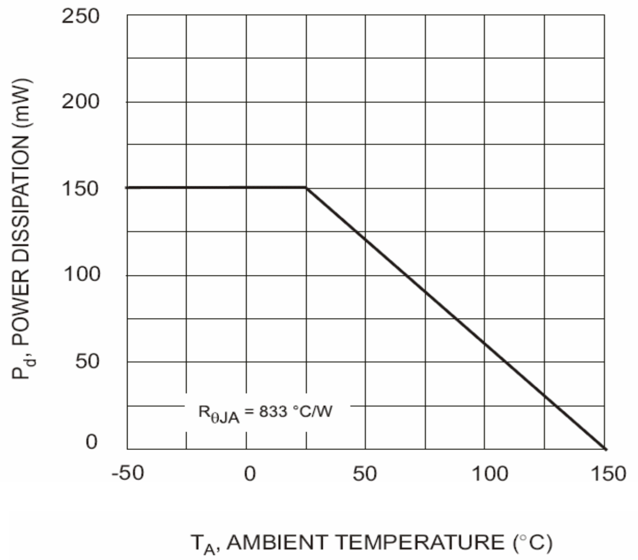

Fig. 1, Derating Curve - Total

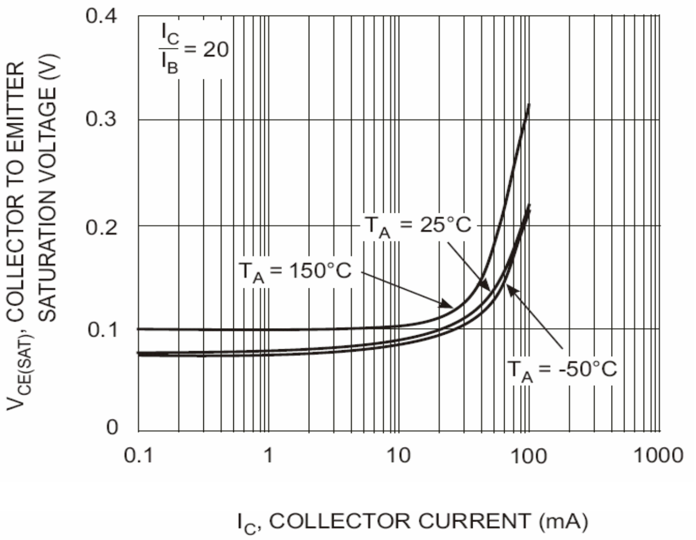

Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

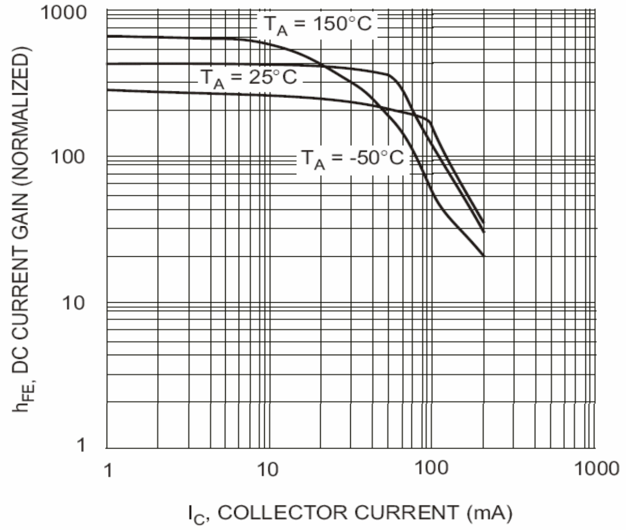

Fig. 3, DC Current Gain vs Collector Current

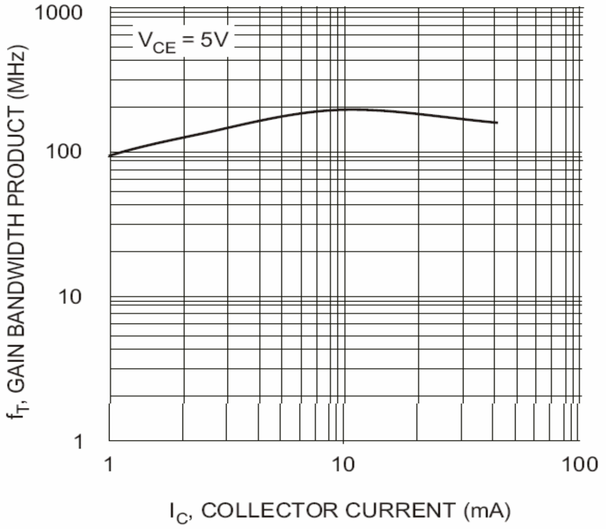

Fig. 4, Gain Bandwidth Product vs Collector Current