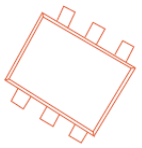
SOT-563 Plastic-Encapsulate Transistors

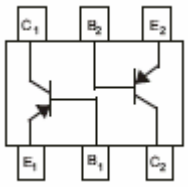
BC857BV DUAL TRANSISTOR (PNP)

SOT-563



FEATURES

- Epitaxial Die Construction
- Complementary NPN Types Available (BC847BV)
- Ultra-Small Surface Mount Package



Marking: K5V

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	-5	V
I_C	Collector Current -Continuous	-0.1	A
P_C	Collector Power Dissipation	0.15	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	℃/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55 to +150	℃

ELECTRICAL CHARACTERISTICS(Ta=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	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V,I_E=0			-15	nA
DC current gain	h_{FE}	V_{CE}=-5V,I_C=-2mA	220		475	
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	I_C=-10mA,I_B=-0.5mA			-0.1	V
	$V_{CE(sat)(2)}$	I_C=-100mA,I_B=-5mA			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)(1)}$	I_C=-10mA,I_B=-0.5mA		-0.7		V
	$V_{BE(sat)(2)}$	I_C=-100mA,I_B=-5mA		-0.9		V
Base-emitter voltage	$V_{BE(1)}$	V_{CE}=-5V,I_C=-2mA	-0.6		-0.75	V
	$V_{BE(2)}$	V_{CE}=-5V,I_C=-10mA			-0.82	V
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA,f=100MHz	100			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=-0.2mA, f=1kHZ,Rs=2KΩ,BW=200Hz			10	dB