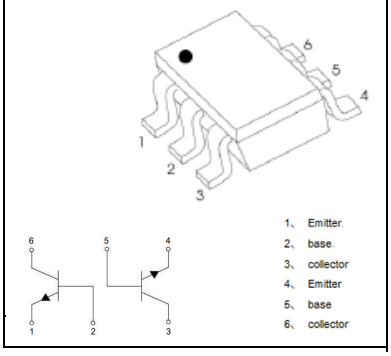
BC846BS

Dual Transistor (NPN+NPN)

FEATURES

- Two isolated NPN/NPN Transistors in one package
- Surface mount package ideally Suited for Automatic Insertion
- Compliant to Halogen-free

SOT-363



MARKING: 4Ft

MAXIMUM RATINGS(T_a =25℃ unless otherwise noted)

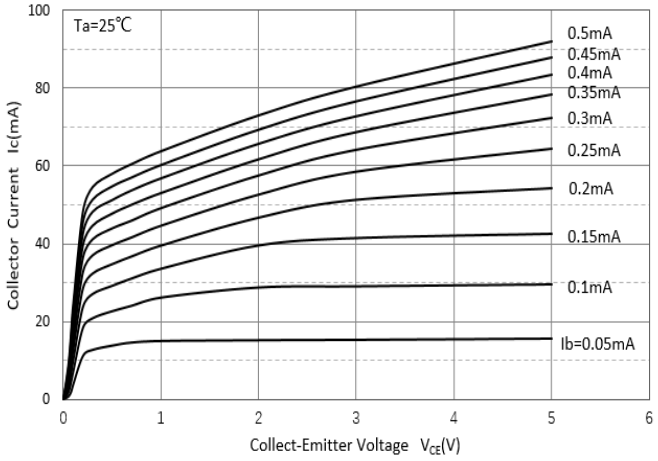
Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	VCBO	V	IC=10μA,IE=0	80
Collector-Emitter Voltage	VCEO	V	IC =10mA,IB=0	65
Emitter-Base Voltage	VEBO	V	IE=10μA,IC=0	6
Collector Current -Continuous	IC	mA		100
Total Device Dissipation	PC	mW		300
Junction Temperature	Tj	℃		150
Storage Temperature	TSTG	℃		-55 to +150

CHARACTERISTICS (Ta=25℃ unless otherwise specified)

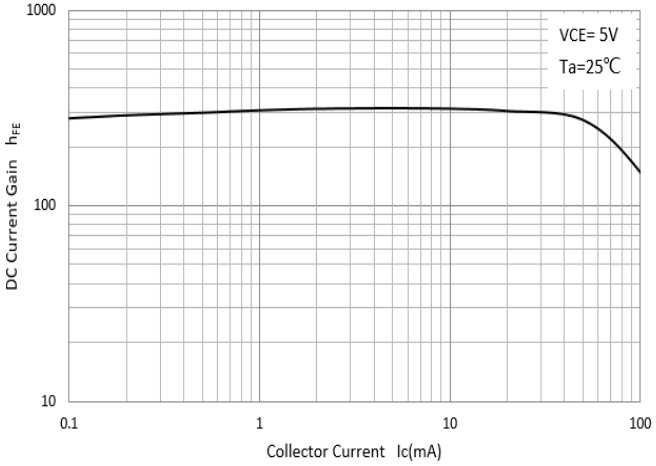
Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-base breakdown voltage	V_{CBO}	V	IC=10μA,IE=0	80		
Collector-emitter breakdown voltage	V_{CEO}	V	IC =10mA,IB=0	65		
Emitter-base breakdown voltage	V_{EBO}	V	IE=10μA,IC=0	6		
Collector cut-off current	I_{CBO}	nA	VCB=30V,IB=0			15
Collector cut-off current	I_{EBO}	nA	VEB=5V, IC=0			100
DC current gain	h_{FE}		VCE=5V,IC=2mA	200		450
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=10mA,IB=0.5mA			0.25
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=100mA,IB=5mA			0.65
Base-emitter saturation voltage	$V_{BE(sat)*}$	V	IC=10mA,IB=0.5mA			
Base-emitter saturation voltage	$V_{BE(sat)*}$	V	IC=100mA,IB=5mA			
Base-emitter Voltage	VBE	V	VCE=5V,IC=2mA	0.58	0.665	0.7
Transition frequency	fT	MHz	VCE=5V,IC=10mA,f=100MHz		200	

Typical Characteristics(Typical)

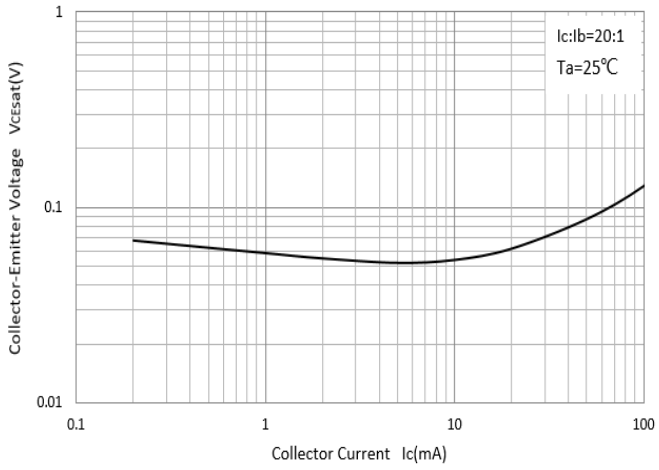
Static Characteristic



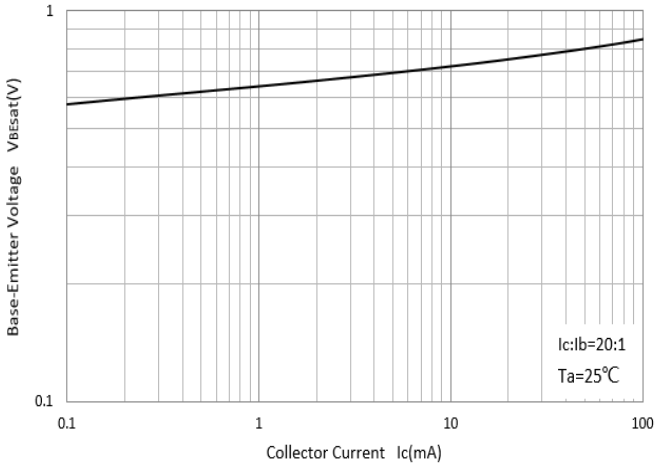
DC Current Gain



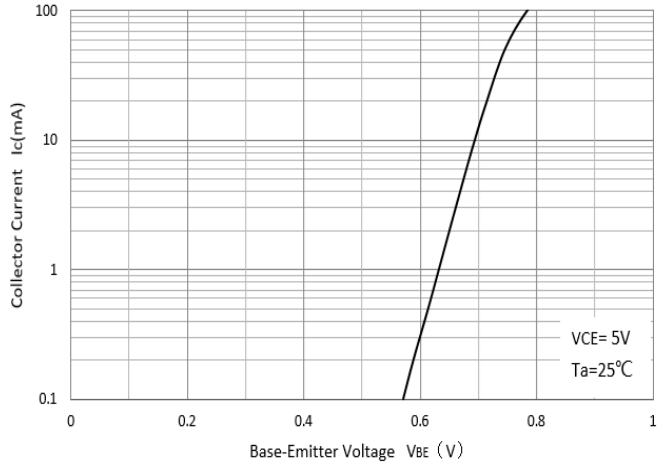
Collector-Emitter Saturation Voltage



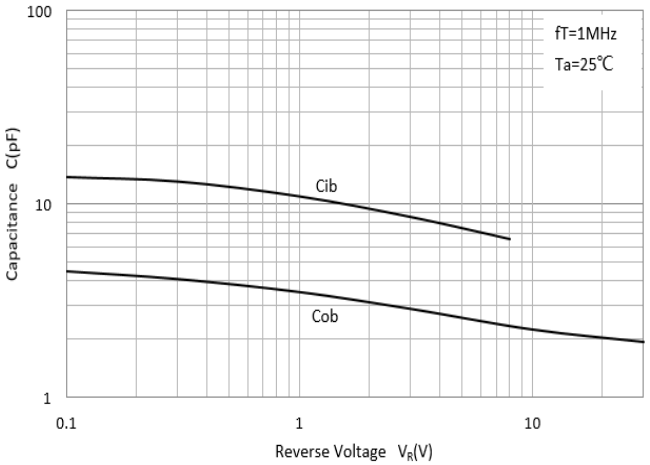
Base-Emitter Saturation Voltage



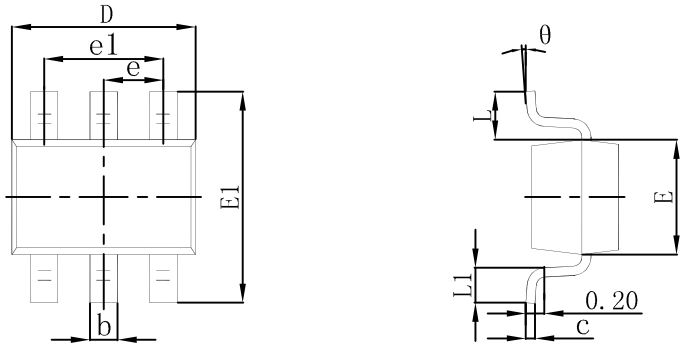
Base-Emitter On Voltage

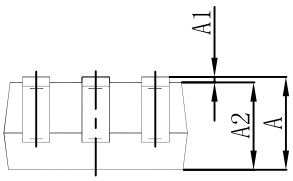


Cob/Cib-V_{CB}/V_{EB}



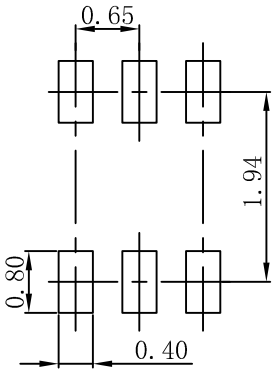
SOT-363 Package Outline Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.050	0.250	0.002	0.010
D	1.800	2.200	0.071	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.