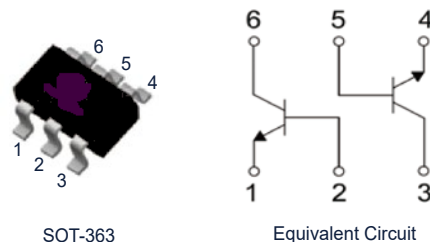


Features

- This device is designed for general purpose amplifier applications



Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parametar	Valua	Unit
V_{CB0}	Collector-Base Voltage	50	V
V_{CE0}	Collector-Emitter Voltage	45	V
V_{EB0}	Emitter-Base Voltage	6	V
I_C	Collector Current	0.1	A
P_D	Power Dissipation	0.2	W
$R_{\theta JA}$	Thermal Resistance. Junction to Ambient	625	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

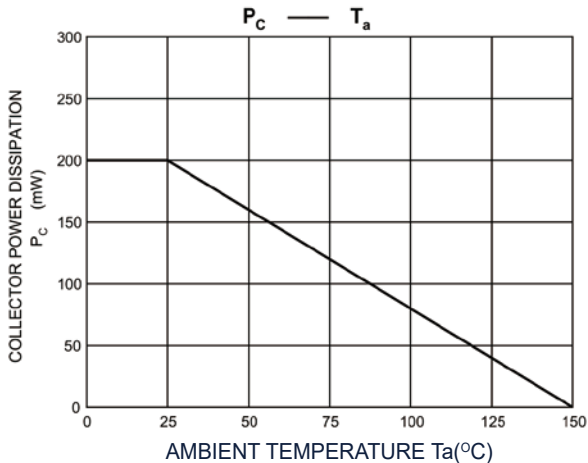
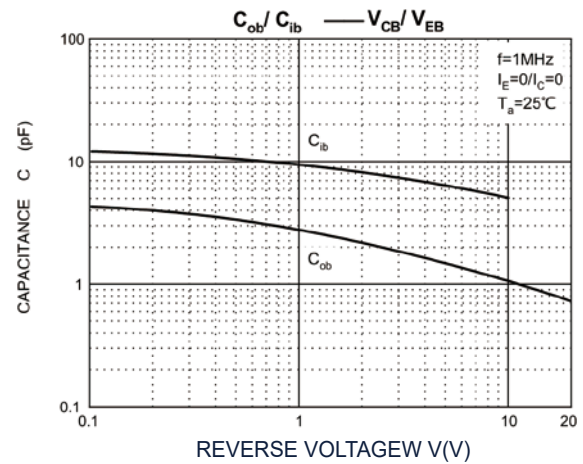
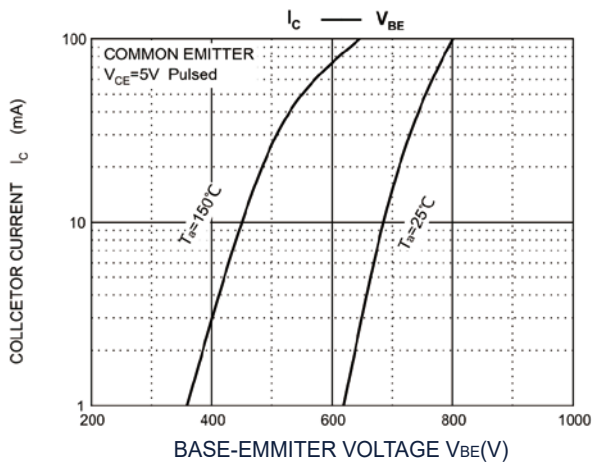
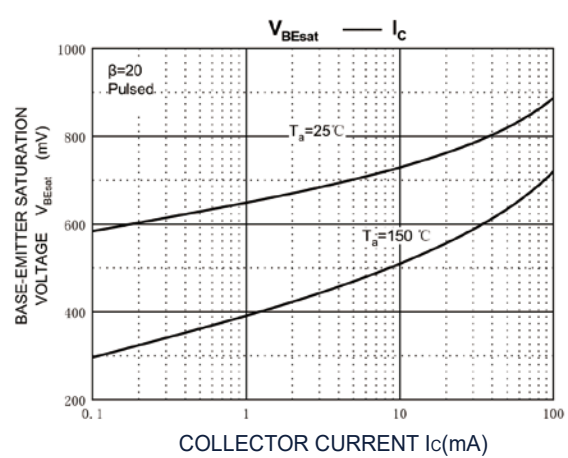
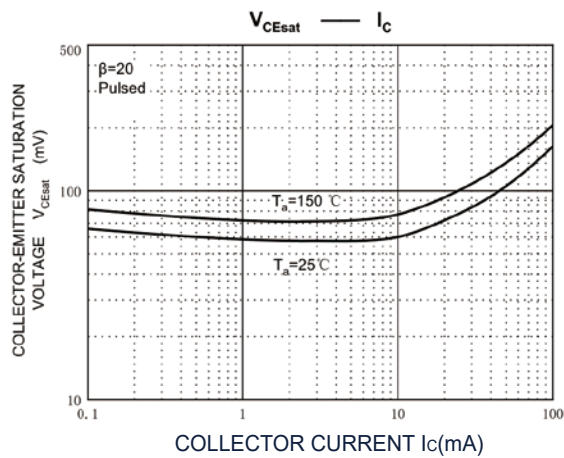
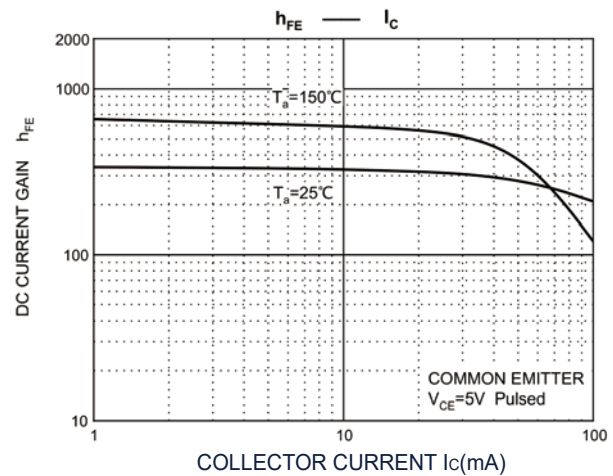
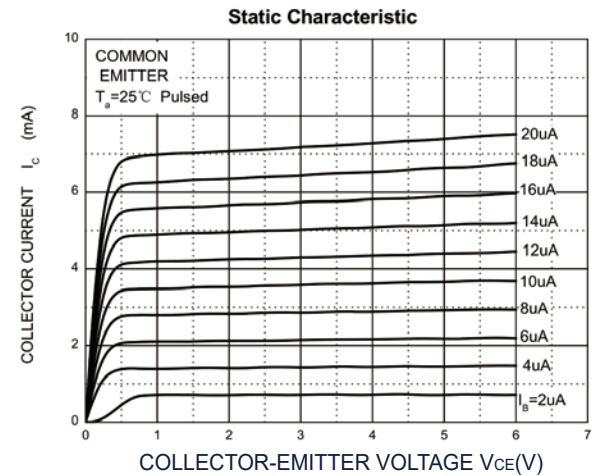
Symbol	Parametar	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\mu\text{A}, I_E=0$	50			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1\text{mA}, I_B=0$	45			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu\text{A}, I_C=0$	6			V
I_{CBO}	Collector cut-off current	$V_{CB}=30\text{V}, I_E=0$			15	nA
I_{EBO}	Emitter cut-off current	$V_{EB}=4\text{V}, I_C=0$			15	nA
h_{FE}	DC current gain	$V_{CE}=5\text{V}, I_C=2\text{mA}$	200		450	
$V_{CE(sat)(1)}$	Collector-emitter saturation voltage	$I_C=10\text{mA}, I_B=0.5\text{mA}$			0.25	V
$V_{CE(sat)(2)}$		$I_C=100\text{mA}, I_B=5\text{mA}$			0.65	V
$V_{BE(1)}$	Base-emitter voltage	$V_{CE}=5\text{V}, I_C=2\text{mA}$	0.58		0.7	V
$V_{BE(2)}$		$V_{CE}=5\text{V}, I_C=10\text{mA}$			0.77	V
f_T	Transition frequency	$V_{CE}=5\text{V}, I_C=20\text{mA}, f=100\text{MHz}$		200		MHz
C_{obo}	Base-emitter saturation voltage	$V_{CB}=10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		2		pF

Ordering information

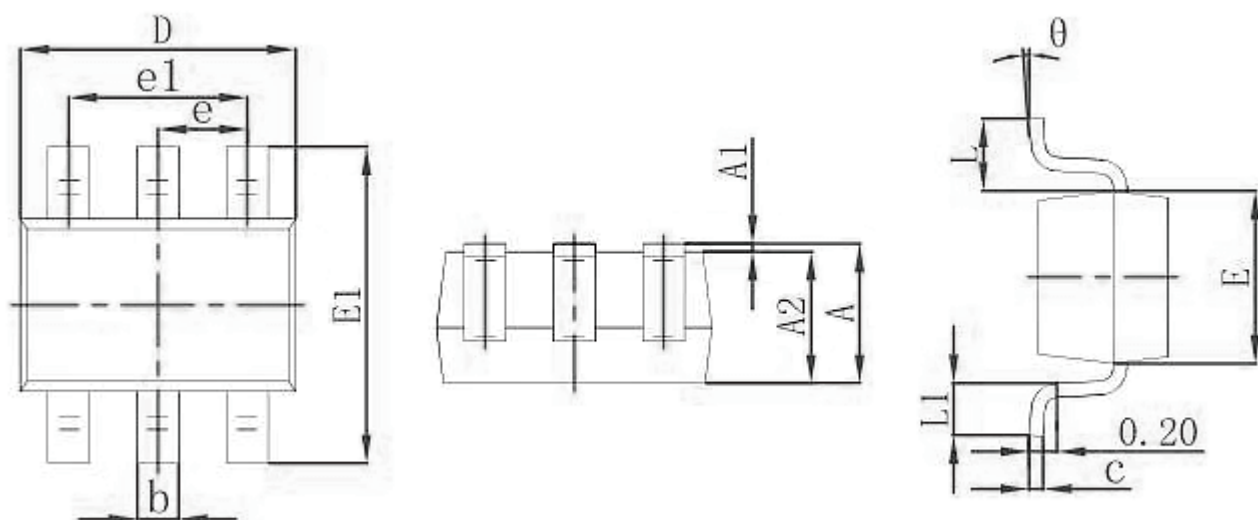
Product ID	Pack	Naming rule	Marking	$h_{FE}(1)$	Qty (PCS)
BC847BS	SOT-363	BC847BS 产品名称 product name	1C	200-450	3000

Previous allowed marking: 1F

Typical Characteristics



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	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	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°