

SOT-363 Plastic-Encapsulate Transistors

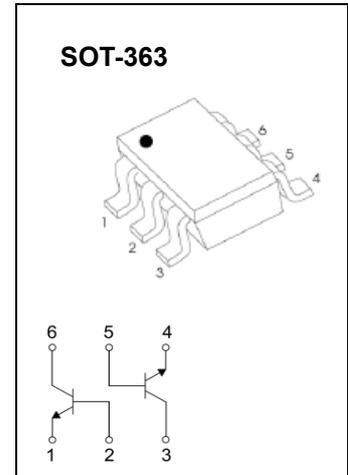
FEATURES

- Two transistors in one package
- Reduces number of components and board space
- No mutual interference between the transistors

MARKING: BC847ADW 1E
BC847BDW 1F
BC847CDW 1G

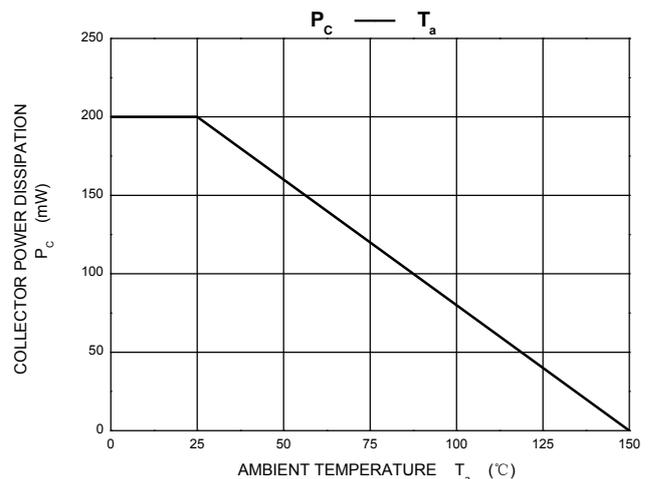
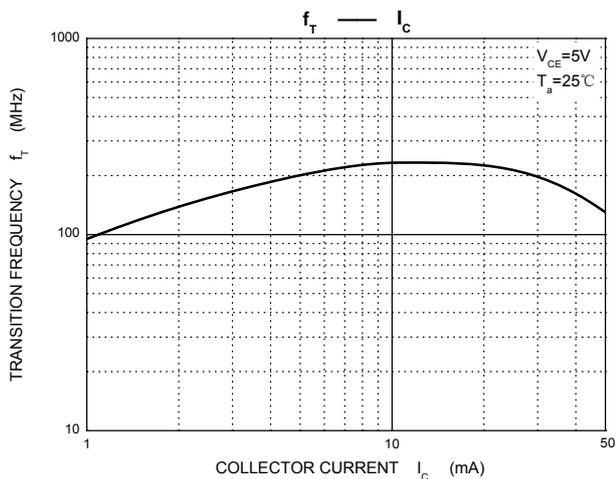
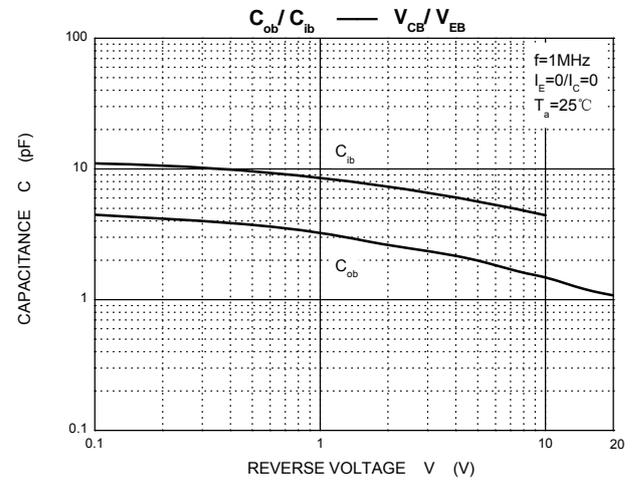
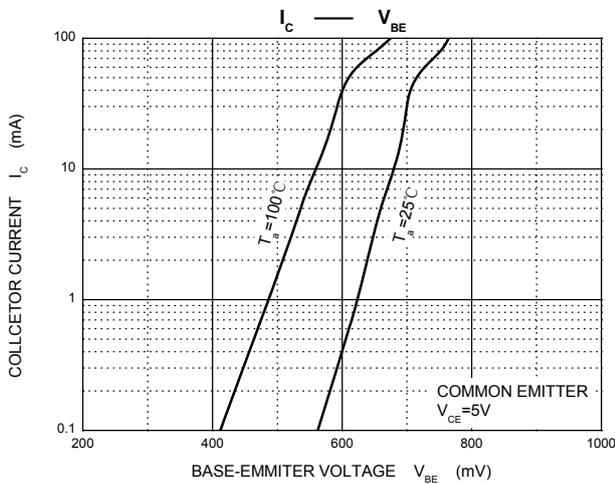
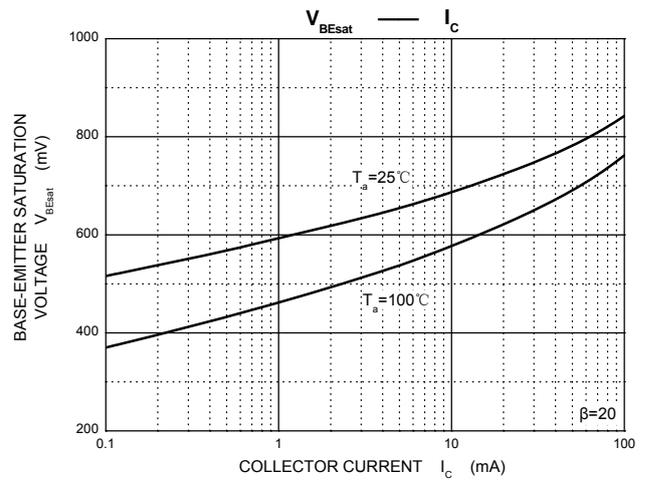
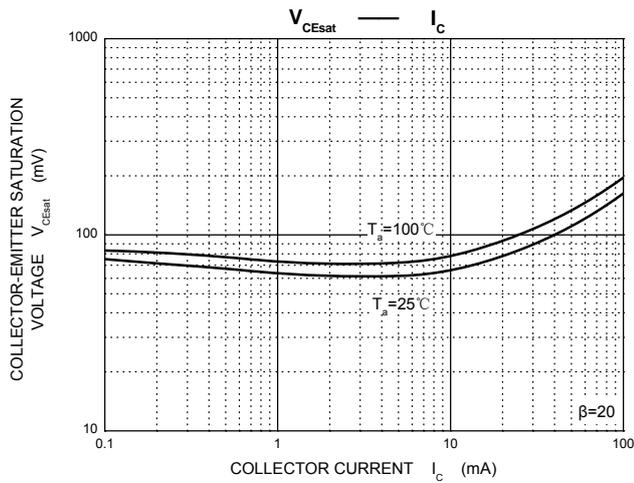
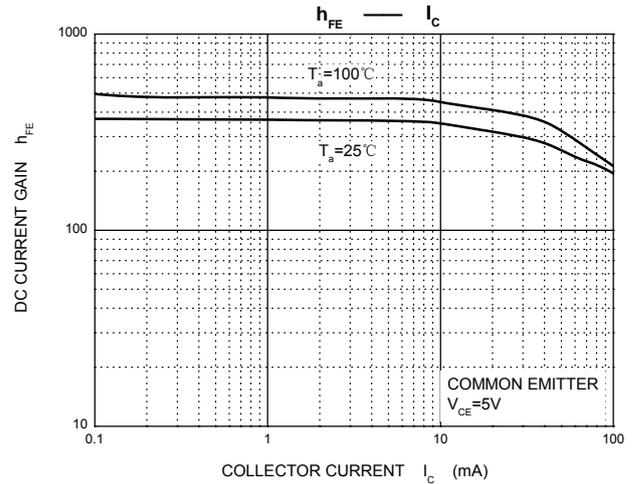
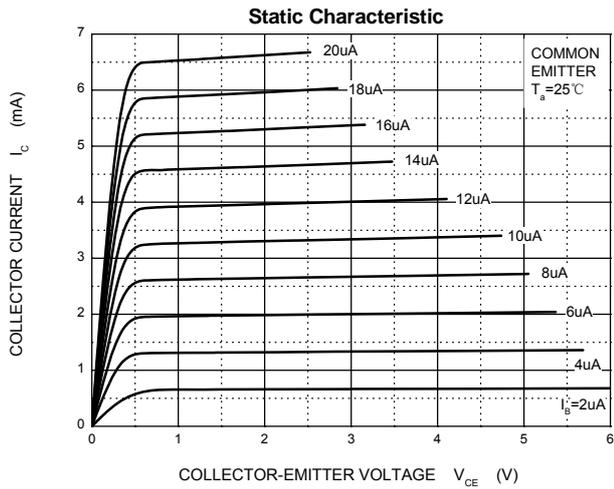
MAXIMUM RATINGS(T_a=25°C unless otherwise noted)

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	200	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



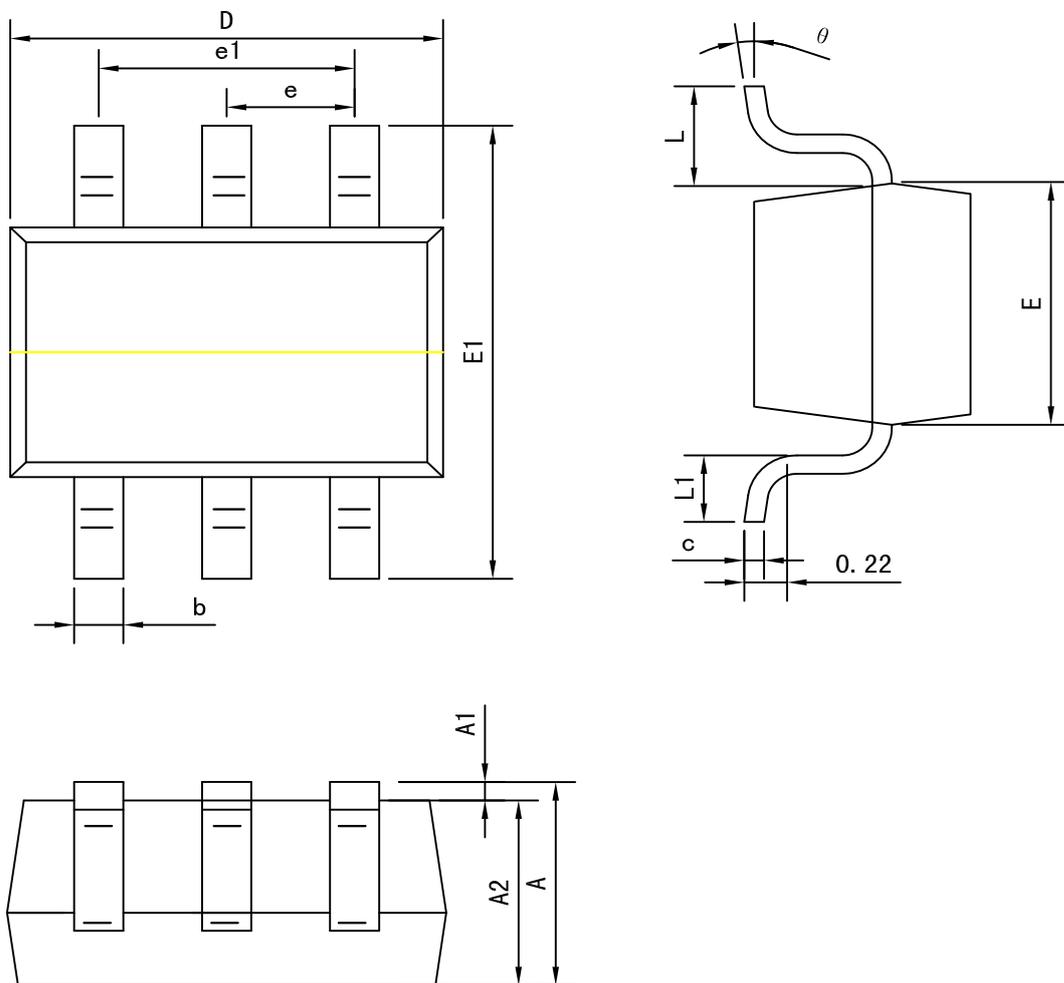
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

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 =10μA, 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}	I _C =0, V _{EB} =5V			5	μA
DC current gain Group	BC847ADW BC847BDW BC847CDW	h _{FE} V _{CE} =5V, I _C =2mA	110 200 420		220 450 800	
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			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =0.5mA		0.77		V
Transition frequency	f _T	V _{CB} =5V, I _E =10mA, f=100MHz	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			1.5	pF



Package outline dimensions

SOT-363



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°