

Plastic-Encapsulate Transistors

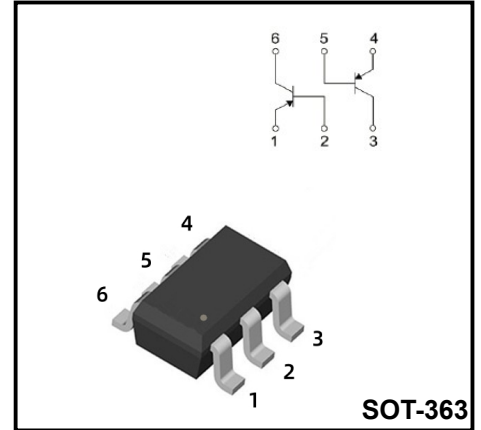
DUAL TRANSISTOR(PNP+PNP)

FEATURES

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

MECHANICAL DATA

- ◆Case: SOT-363
- ◆Epoxy UL: 94V-0
- ◆Mounting Position: Any



Maximum Ratings & Thermal Characteristics

(Rat ings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Units
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter -Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_c	-200	mA
Collector Power Dissipation	P_c	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55-+150	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$	417	°C/W

Electrical Characteristics

(Rat ings at 25°C ambie nt temperature unless otherwise specified).

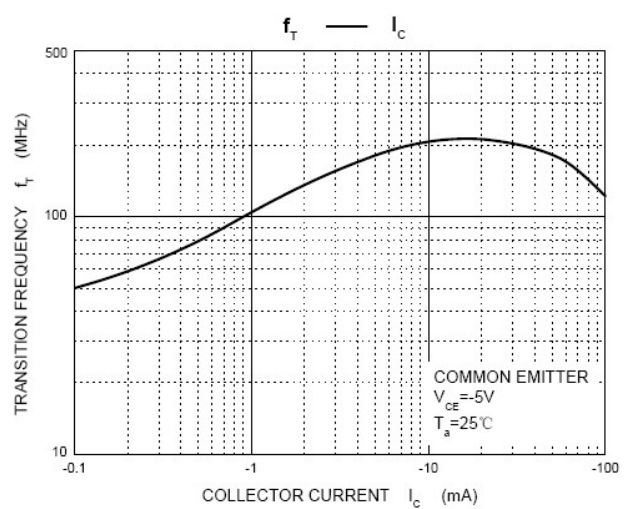
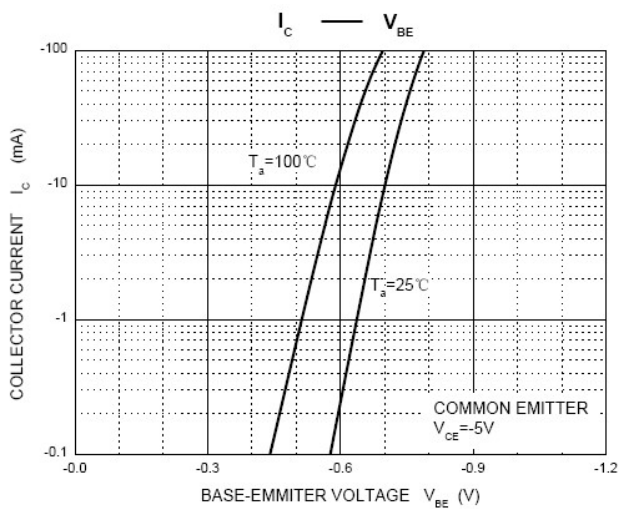
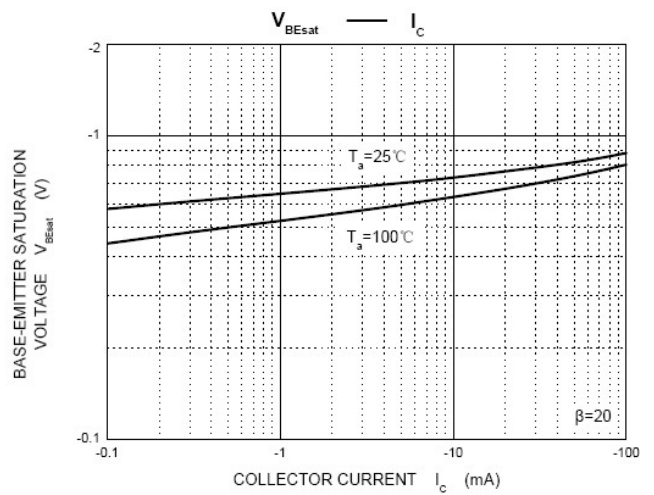
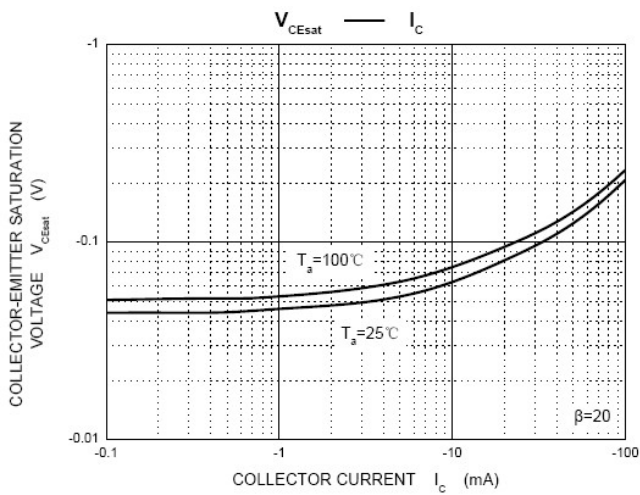
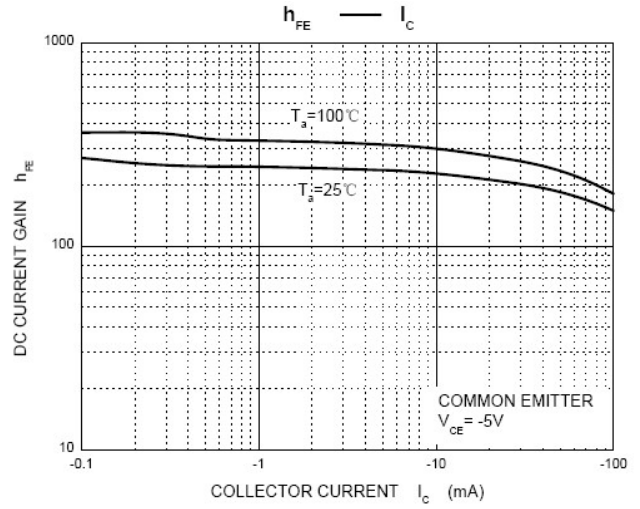
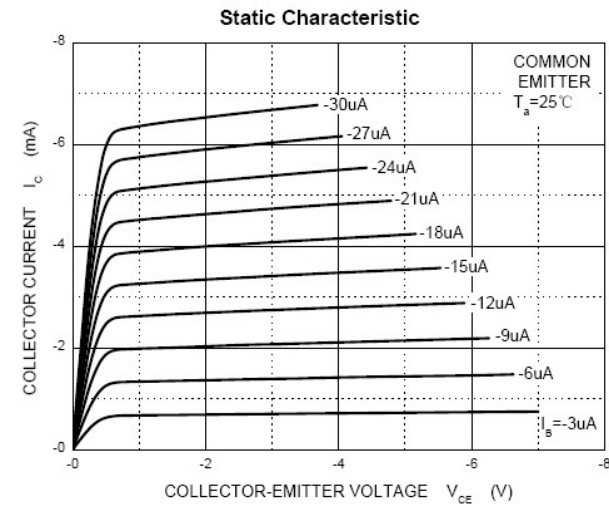
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$I_C=-10\mu A, I_E=0$	$V_{(BR)CBO}$	-50			V
Collector-emitter breakdown voltage	$I_C=-10mA, I_B=0$	$V_{(BR)CEO}$	-45			V
Emitter-base breakdown voltage	$I_E=-10\mu A, I_C=0$	$V_{(BR)EBO}$	-5			V
Collector cut-off current	$V_{CB}=-30V, I_E=0$	I_{CBO}			-15	nA
Base cut-off current	$V_{EB}=-5V, I_C=0$	I_{EBO}			-100	nA
DC current gain	$V_{CE}=-5V, I_C=-2mA$	h_{FE}	125		630	
Collector-emitter saturation voltage	$I_C=-10mA, I_B=-0.5mA$	$V_{CE(sat)}$			-0.3	V
	$I_C=-100mA, I_B=-5mA$				-0.65	V
Base -emitter voltage	$V_{CE}=-5V, I_B=-2mA$	V_{BE}	-0.6		-0.75	V
	$V_{CE}=-5V, I_B=-10mA$				-0.82	V
Transition frequency	$V_{CE}=-5V, I_C=-10mA, f=100MHz$	f_T		200		MHz
Collector output capacitance	$V_{CB}=-10V, I_E=0, f=1MHz$	C_{ob}		3.5		pF
Noise figure	$V_{CE}=-5V, I_C=-0.2mA, f=1KHz; R_s=2K\Omega, BW=200Hz$	NF		2.5		dB

*Pulse test: pulse width≤350us,duty cycle≤2.0%

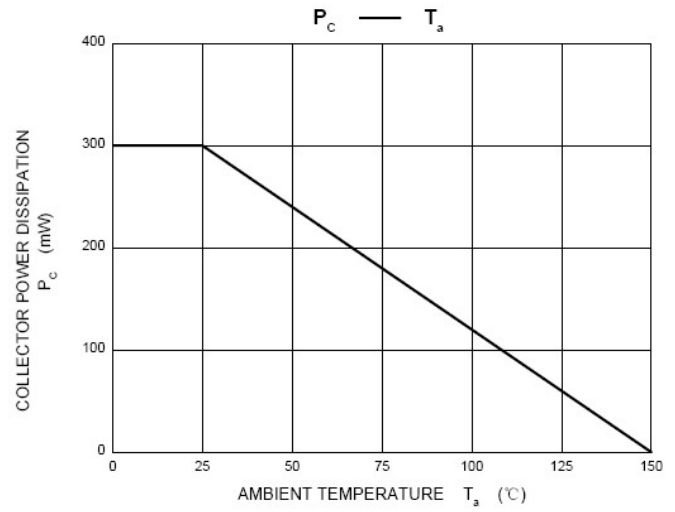
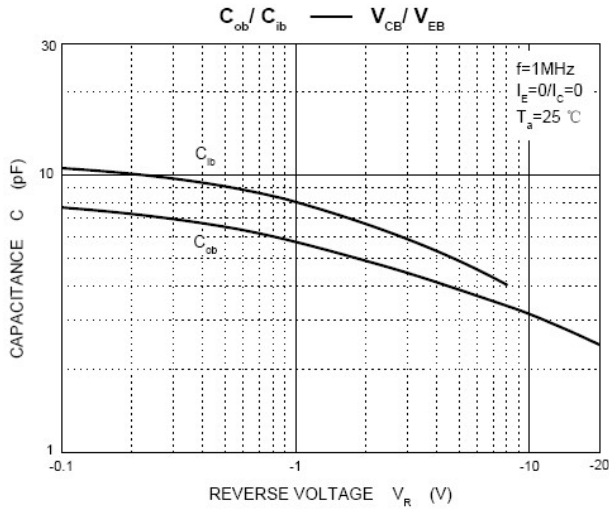
CLASSIFICATION OF h_{FE}

RANK	BC857ADW	BC857BDW	BC857CDW	BC857SDW
RANGE	125-250	250-475	475-630	125-630
Marking	3E	3F	3G	3C

Typical Characteristics



Typical Characteristics



Ordering information

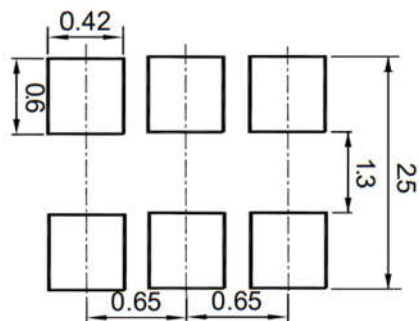
Package	Packing Description	Packing Quantity
SOT-363	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOT-363

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	-	0.1	-	3.94
bp	0.20	0.30	7.87	11.81
c	0.10	0.25	3.94	9.84
D	1.8	2.2	70.87	86.61
E	1.15	1.35	45.28	53.15
e	1.3		51.18	
e1	0.65		25.6	
HE	2.0	2.2	78.74	86.6
Lp	0.15	0.45	5.90	17.71
Q	0.15	0.25	5.90	9.84
v	0.2		7.78	
w	0.2		7.78	
y	0.1		3.94	

The recommended mounting pad size



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