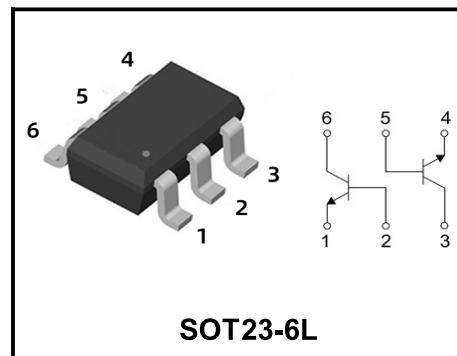


Plastic-Encapsulate Transistors

DUAL TRANSISTOR (NPN+NPN)

Features

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



Marking Code

BC846AF	4At
BC846BF	4Bt
BC846CF	4Gt

MAXIMUM RATINGS

(Ta=25°C unless otherwise noted)

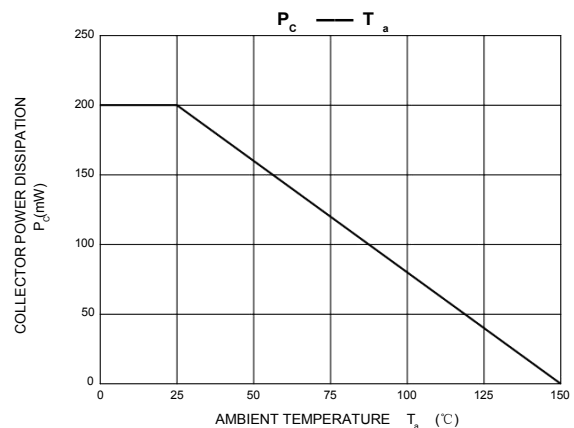
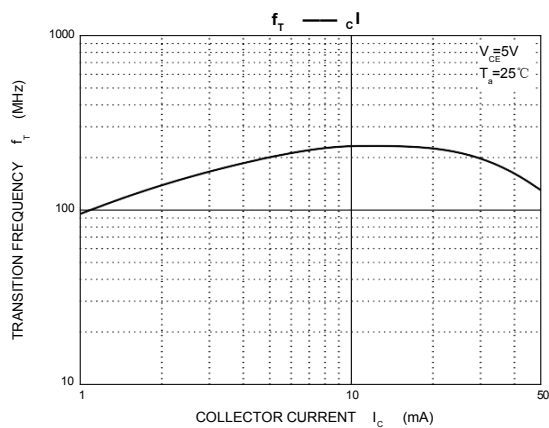
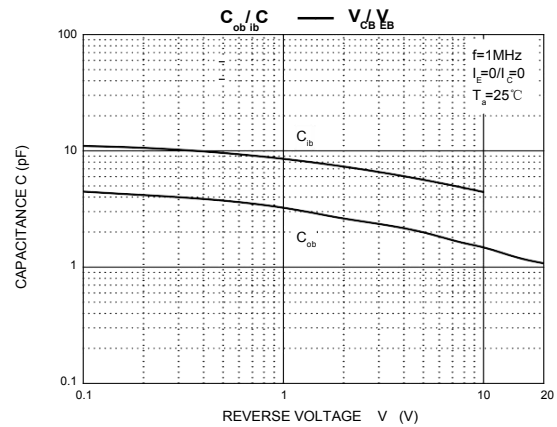
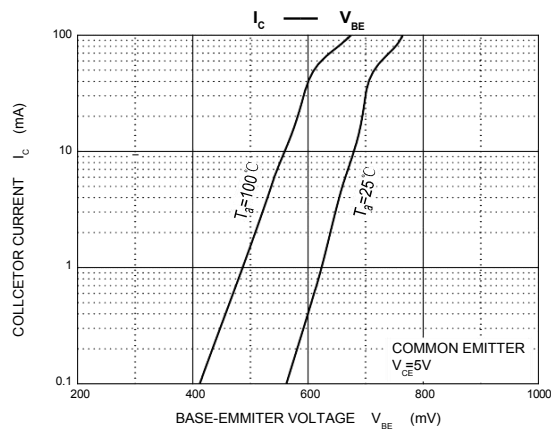
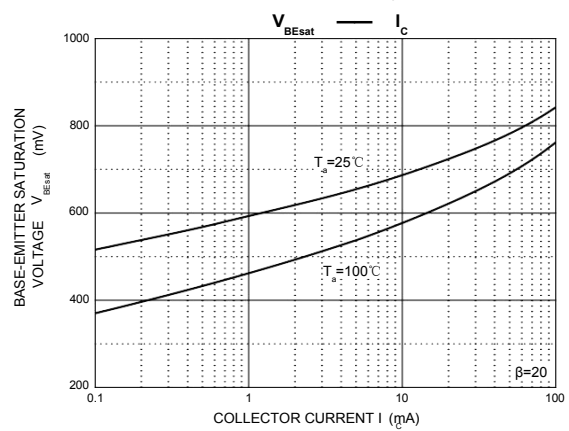
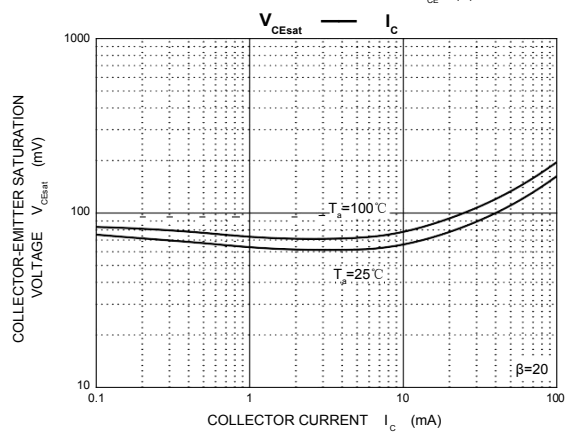
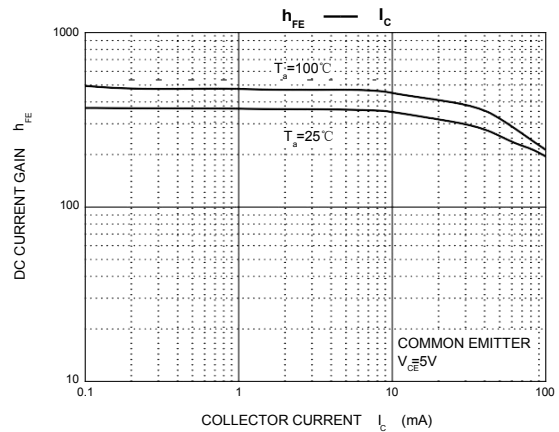
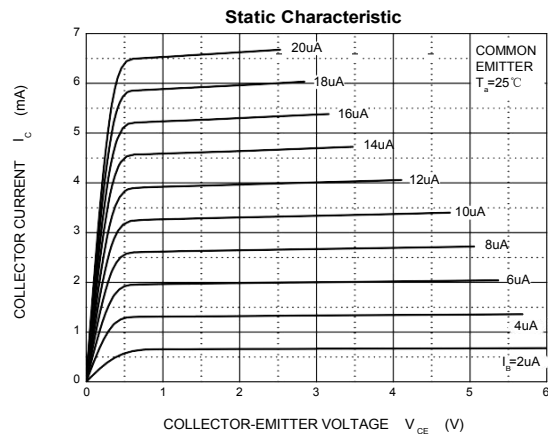
Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	65	V
Emitter -Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	0.1	A
Collector Dissipation	P_C	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55-+150	°C

ELECTRICAL CHARACTERISTICS

(Ta=25°C unless otherwise specified)

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	80	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	65	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=70V, I_E=0$	-	-	100	nA
Emitter cut-off current	I_{EBO}	$I_C=0, I_B=5V$	-	-	100	nA
DC current gain	h_{FE}	A $V_{CE}=5V, I_C=2mA$	110		220	
		B	200		450	
		C	420		800	
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	$I_C=10mA, I_B=0.5mA$	-	-	0.25	V
	$V_{CE(sat)(2)}$	$I_C=100mA, I_B=5mA$	-	-	0.5	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=5mA$	-	-	1.1	V
Transition frequency	f_T	$V_{CE}=5V, I_E=10mA, f=100MHz$	100	-	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0 f=1MHz$	-	-	1.5	pF

Typical Characteristics



Ordering information

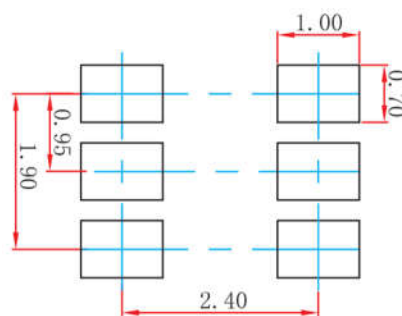
Package	Packing Description	Packing Quantity
SOT23-6L	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOT23-6L

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.05	1.25	41	49
A1	0	0.10	0	3.9
A2	1.05	1.15	41	45
b	0.30	0.50	11.8	19.7
c	0.10	0.20	3.9	7.9
D	2.82	3.02	111	119
E1	1.50	1.70	45	67
E	2.65	2.95	104	116
e	0.950(BSC)		37(BSC)	
e1	1.80	2.00	71	79
L	0.30	0.60	11.8	23.6
θ	0°	8°	0°	8°

The recommended mounting pad size



Disclaimer

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