

FEATURES

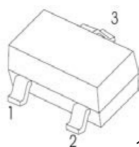
- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

MARKING

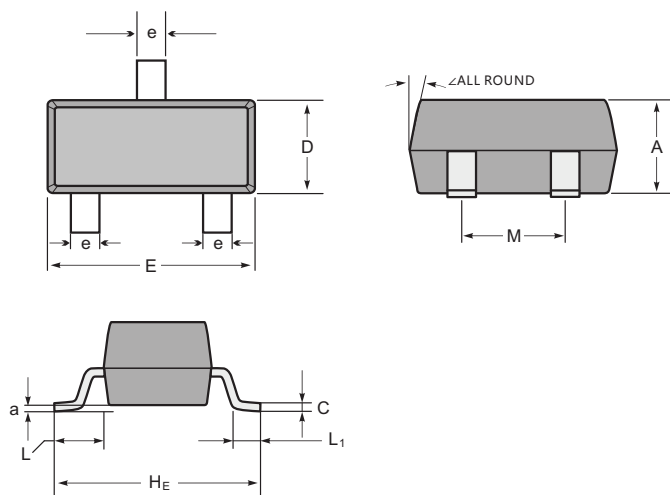
BC856A=3A;BC856B=3B;

BC857A=3E;BC857B=3F;BC857C=3G;

BC858A=3J; BC858B=3K; BC858C=3L



1.BASE
2.EMITTER
3.COLLECTOR



SOT-23 mechanical data

UNIT	A	C	D	E	HE	e	M	L	L1	a	∠
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage		
	BC856	-80	V
	BC857	-50	
	BC858	-30	
V_{CEO}	Collector-Emitter Voltage		
	BC856	-65	V
	BC857	-45	
	BC858	-30	
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-0.1	A
P_C	Collector Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	°C/W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-65~+150	°C

BC856A\B
BC857A\B\C
BC858A\B\C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856 BC857 BC858	V _{CBO}	I _C = -10μA, I _E =0	-80 -50 -30		V
Collector-emitter breakdown voltage BC856 BC857 BC858	V _{CEO}	I _C = -10mA, I _B =0	-65 -45 -30		V
Emitter-base breakdown voltage	V _{EBO}	I _E = -1μA, I _C =0	-5		V
Collector cut-off current BC856 BC857 BC858	I _{CBO}	V _{CB} = -70 V, I _E =0 V _{CB} = -45 V, I _E =0 V _{CB} = -25 V, I _E =0		-0.1	μA
Collector cut-off current BC856 BC857 BC858	I _{CEO}	V _{CE} = -60 V, I _B =0 V _{CE} = -40 V, I _B =0 V _{CE} = -25 V, I _B =0		-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5 V, I _C =0		-0.1	μA
DC current gain BC856 BC857 BC856A, 857A,858A BC856B, 857B,858B BC857C,BC858C	h _{FE}	V _{CE} = -5V, I _C = -2mA	125 125 125 220 420	475 800 250 475 800	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B = -5 mA		-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} = -5 V, I _C = -10mA f=100MHz	100		MHz
Collector capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		4.5	pF

RATING AND CHARACTERISTIC CURVES (BC856 THRU BC857)

