

BC817

Surface mount switching diode

Features

- For general AF application.
- Complementary PNP type available BC807.
- High collector current, high current gain.
- Low collector-emitter saturation voltage.
- RoHS compliant package

Applications

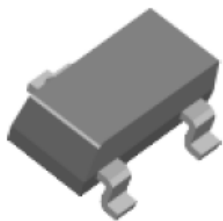
- General purpose medium power amplifier.
- Switching requiring collector currents up to 1.2mA.

Mechanical Data

- Case: SOT-23 Molded plastic

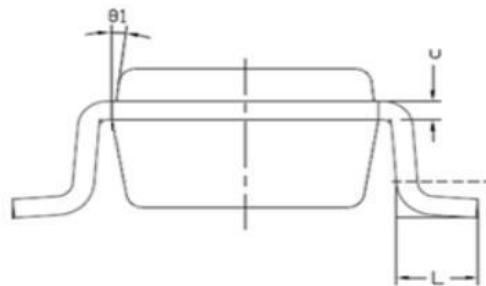
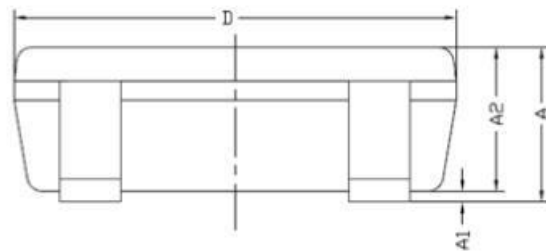
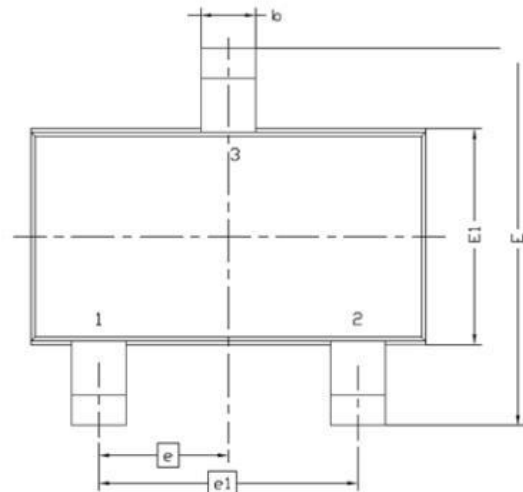
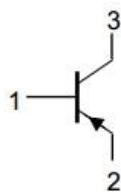
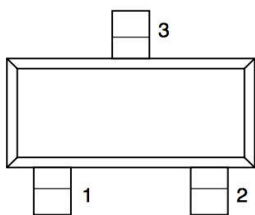
Packing & Order Information

3,000/Reel



**RoHS
COMPLIANT**

Graphic symbol



Symbol	MILLIMETERS	
	MIN	MAX
A	0.8	1.2
A1	0	0.1
A2	0.7	1.1
b	0.3	0.5
c	0.1	0.2
D	2.7	3.1
E	2.6	3
E1	1.4	1.8
e	0.95 BSC	
e1	1.9 BSC	
L	0.3	0.6
θ1	7° NOM	

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ORDERING INFORMATION

Type No.	Marking	Package Code
BC817-16	6A	SOD-23
BC817-25	6B	SOD-23
BC817-40	6C	SOD-23

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	50	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _C	500	mA
Collector Dissipation	P _C	300	mW
Junction and Storage Temperature	T _j , T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Conditions	Symbol	Min	Max	Unit
Collector-base breakdown voltage	I _C =10μA 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 =1μA I _C =0	V _{(BR)EBO}	5		V
Collector cut-off current	V _{CB} =45V I _E =0	I _{CBO}		0.1	μA
Emitter cut-off current	V _{EB} =4V I _C =0 0.1	I _{EBO}		0.1	μA
DC current gain	V _{CE} =1V I _C =100mA	h _{FE}	100	600	
	V _{CE} =1V I _C =100mA		40		
Collector-emitter saturation voltage	I _C =500mA I _B =50mA	V _{CE(sat)}		0.7	V
Base-emitter saturation voltage	I _C =500mA I _B =50mA	V _{BE(sat)}		1.2	V
Collector capacitance	V _{CB} =10V, f=1MHz	C _{ob}		10	pF
Transition frequency	V _{CE} =5V I _C =10mA f=100MHz	f _T	100		MHz

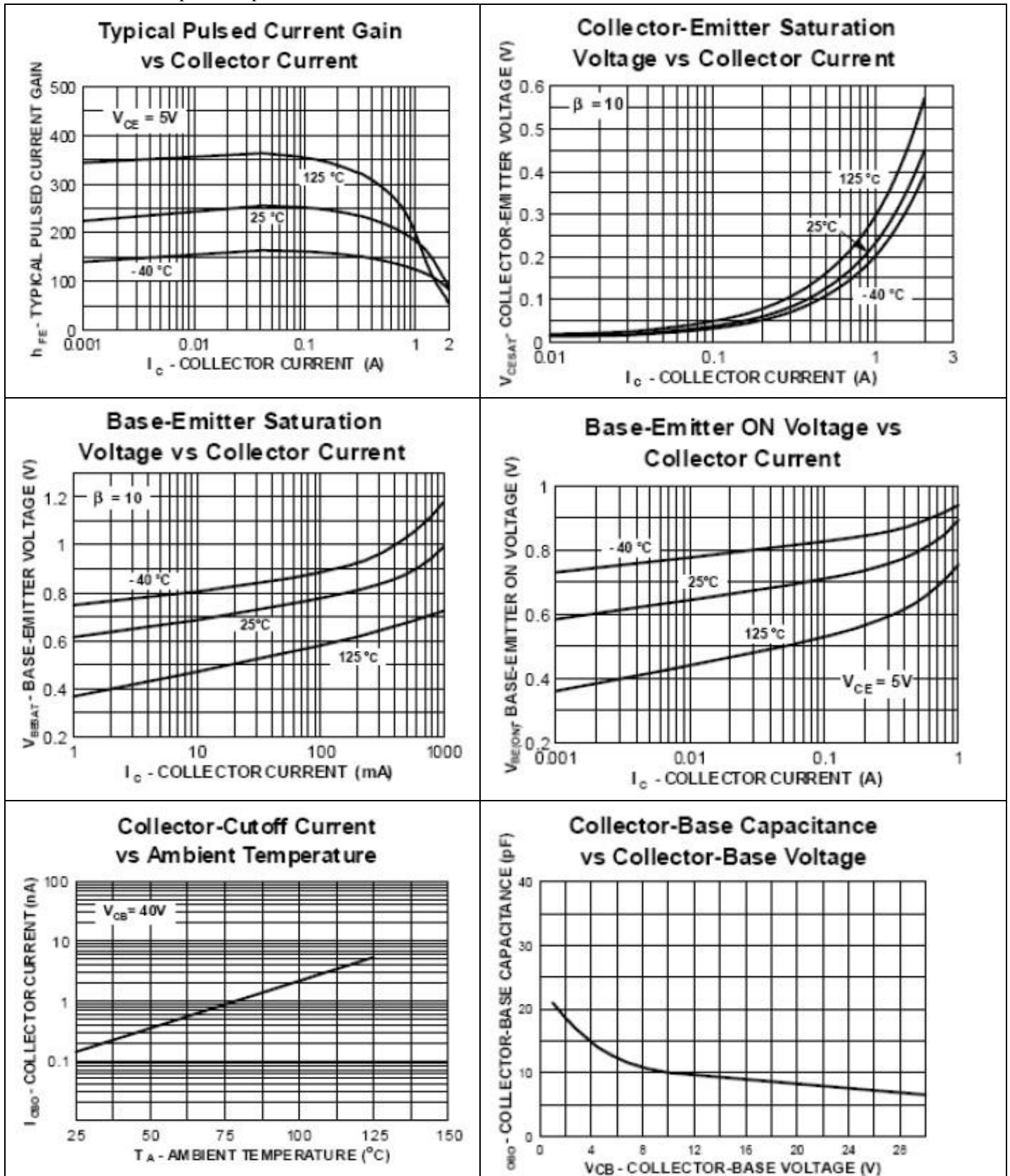
CLASSIFICATION OF HFE(1)

Rank	BC817-16	BC817-25	BC817-40
Range	100-250	160-400	250-600
Marking	6A	6B	6C

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■ NPN General Purpose Amplifier



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Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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