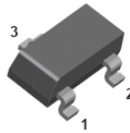
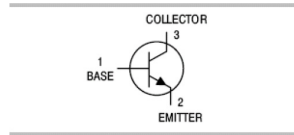
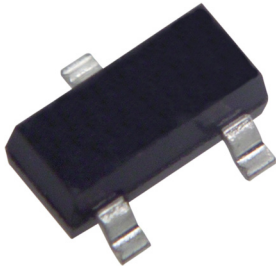


NPN General Purpose Amplifier **multicomp**PRO

RoHS
Compliant



SOT-23

Features:

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

Applications:

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

Maximum Ratings: at 25°C unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	
Emitter-Base Voltage	V_{EBO}	5	
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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B = 0$	45		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\mu\text{A}, I_C = 0$	5		
Collector cut-off current	I_{CBO}	$V_{CB} = 45\text{V}, I_E = 0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$			

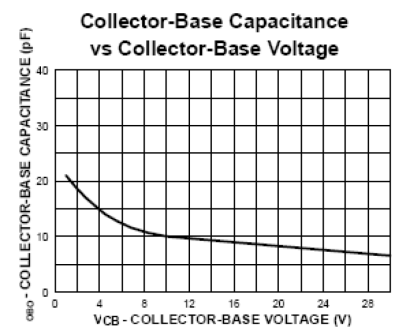
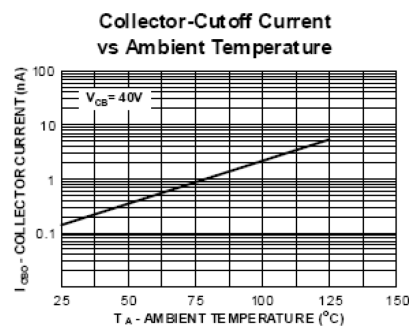
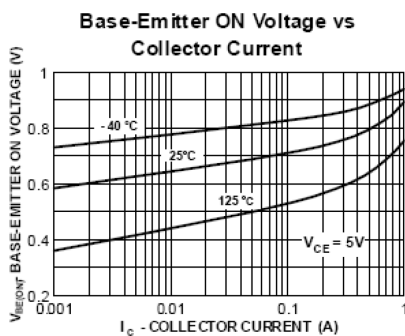
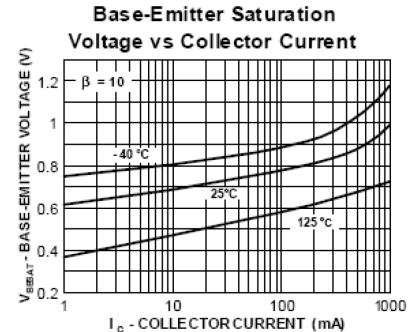
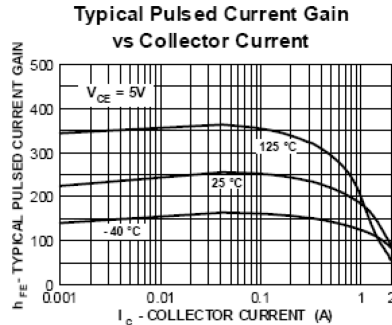
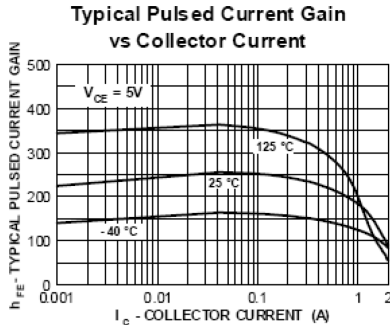
NPN General Purpose Amplifier **multicomp**PRO

Parameter	Symbol	Test conditions	Min.	Max.	Unit
DC current gain	h_{FE}	$V_{CE} = 1V, I_C = -100mA$ $V_{CE} = 1V, I_C = -100mA$	100 40	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50A$		0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = 50mA$		1.2	
Collector capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		10	pF
Transition frequency	f_T	$V_{CE} = 5V, I_C = 10mA, f = 100MHz$	100		MHz

Classification Of $h_{FE(1)}$

Rank	BC817-25-7-F	BC817-40-7-F
Range	160-400	250-600
Marking	6B*	6C

Typical Characteristics: $T_A = 25^\circ C$ unless otherwise specified



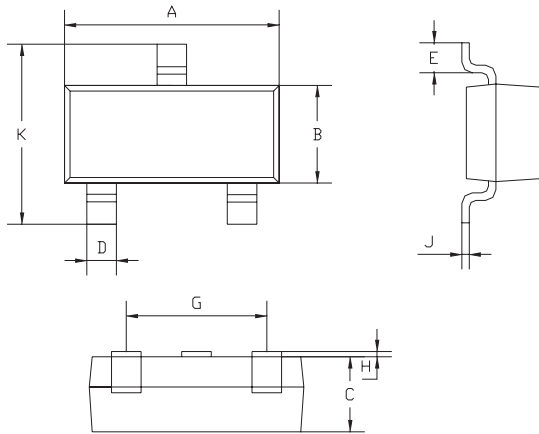
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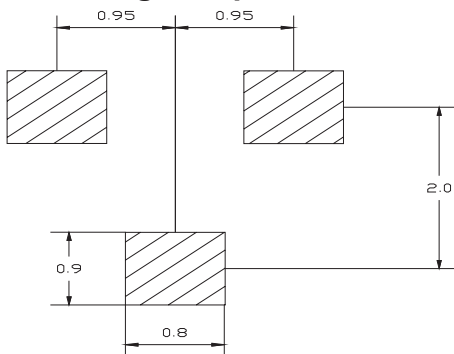
Package Outline:

Plastic surface mounted package



SOT-23		
Dim.	Min.	Max.
A	2.85	2.95
B	1.25	1.35
C	1.0 Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typ.	
K	2.35	2.45

Soldering Footprint



Marking Code

BC817-25-7-F	6B
BC817-40-7-F	6C

Part Number Table

Description	Part Number
Transistor, NPN, 45V, 500mA, SOT-23	BC817-25-7-F
	BC817-40-7-F

Dimensions : Millimetres

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