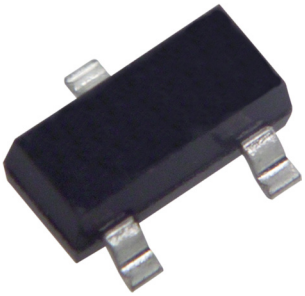
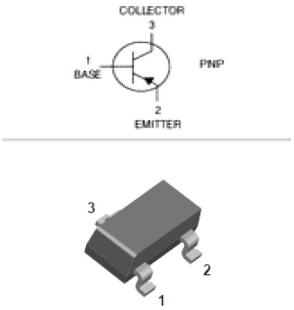
PNP General Purpose Amplifier

multicomp PRO

RoHS Compliant





SOT-23

Features:

- Low current. (max. 100mA)
- Low voltage. (max. 65v)

Applications:

- General purpose switching and amplification.

Maximum Ratings: at 25°C unless otherwise specified.

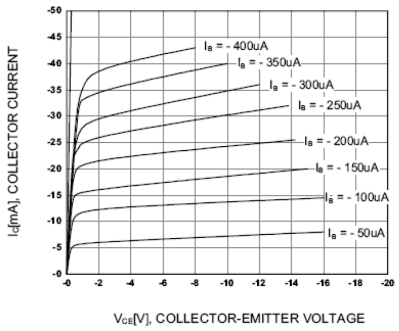
Parameter		Symbol	Value	Unit
Collector-Base Voltage	BC856 BC857	V_{CBO}	-80 -50	V
Collector-Emitter Voltage	BC856 BC857	V_{CEO}	-65 -45	
Emitter-Base Voltage		V_{EBO}	-5	
Collector Current -Continuous		I_C	-0.1	A
Collector Dissipation		P_C	250	mW
Junction and Storage Temperature		T_j, T_{stg}	-65 to +150	°C

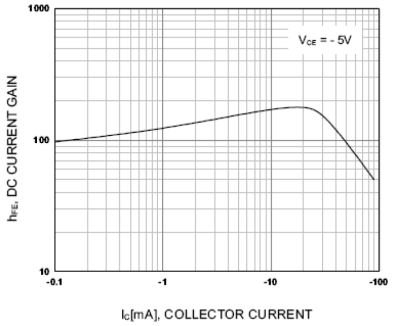
Electrical Characteristics @ T_A = 25°C unless otherwise specified

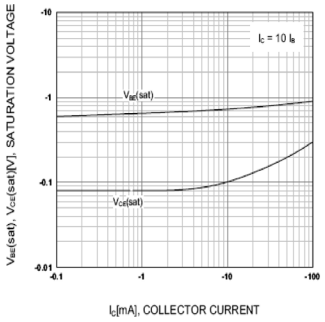
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = -10μA, I_E = 0	-80 -50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -10mA, I_B = 0	-65 -45			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = -1μA, I_C = 0	-5			

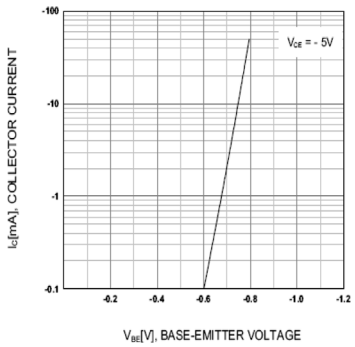
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Collector cut-off current	I_{CBO}	V_{CB} = -30V, I_E = 0		-1	-15	nA
Emitter cut-off current	I_{EBO}	V_{EB} = -5V, I_C = 0			-0.1	µA
DC current gain BC857A BC856B, BC857B BC857C	h_{FE}	V_{CE} = -5V, I_C = -2mA	125 220 420		250 475 800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-5mA I_C=-10mA, I_B=-0.5mA			-0.65 -0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = -100mA, I_B = -5mA			-1.1	
Collector capacitance	C_c	V_{CB}=-10V, I_E=I_e=0 f=1MHz		4.5		pF
Transition frequency	f_T	V_{CE} = -5V, I_C = -10mA, f = 100MHz	100			MHz

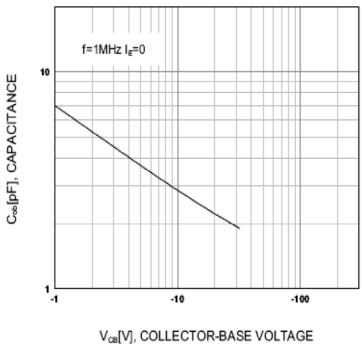
Typical Characteristics: T_A = 25°C unless otherwise specified

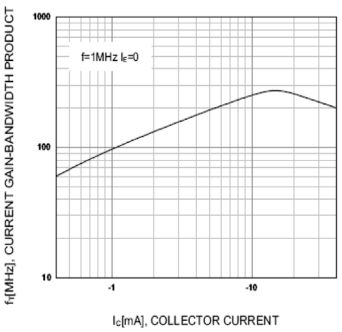












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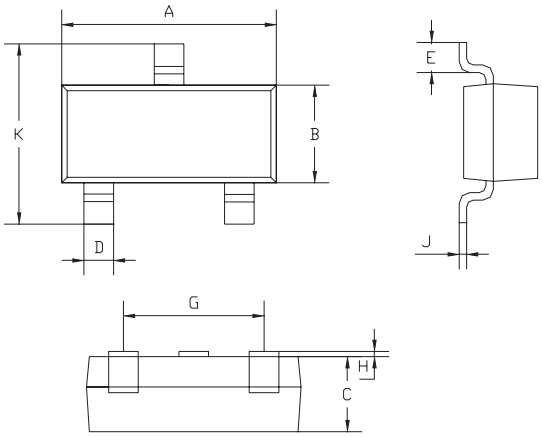
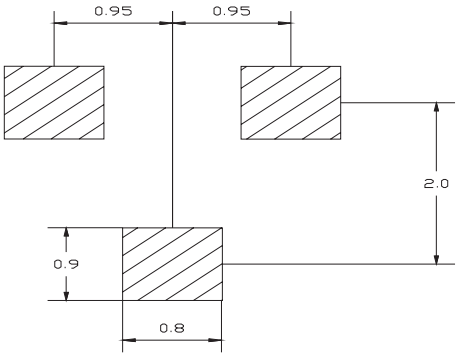
Package Outline:

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 Typical	
K	2.35	2.45

Soldering Footprint



Marking Code

BC856B-7-F	3A/3B
BC857A-7-F	3E/3F/3G
BC857B-TR	
BC857C-7-F	

Part Number Table

Description	Part Number
Transistor, NPN, -65V, 100mA, SOT23	BC856B-7-F
Transistor, NPN, -45V, 100mA, SOT23	BC857A-7-F
	BC857B-TR
	BC857C-7-F

Dimensions : Millimetres

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