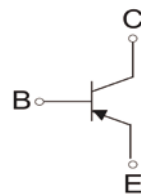


Features

- Low frequency, low noise pre-amplifier.
- High PC and hFE, excellent hFE linearity.



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-50	V
V_{CE0}	Collector-Emitter Voltage	-45	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C/W}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CB0}$	Collector-base breakdown voltage	$I_C=100\mu\text{A}, I_E=0$	-50			V
$V_{(BR)CE0}$	Collector-emitter breakdown voltage	$I_C=-100\text{mA}, I_B=0$	-45			V
$V_{(BR)EB0}$	Emitter-base breakdown voltage	$I_E=-100\mu\text{A}, I_C=0$	-5			V
I_{CBO}	Collector cut-off current	$V_{CB}=-50\text{V}, I_E=0$			-100	nA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
$h_{FE(1)}$	DC current gain(1)	$V_{CE}=-5\text{V}, I_C=-1\text{mA}$	220		475	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage				-1.0	V
f_T	Transition frequency	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=30\text{MHz}$	150			MHz

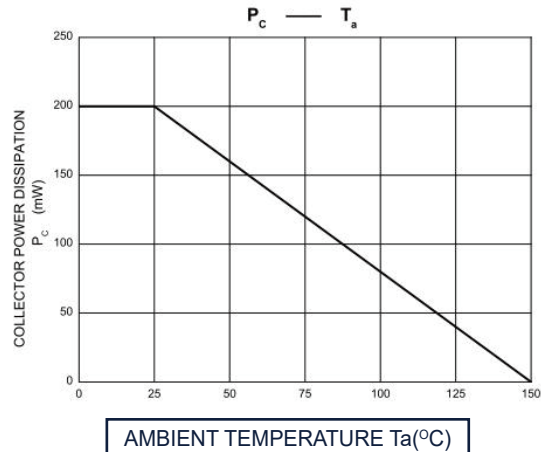
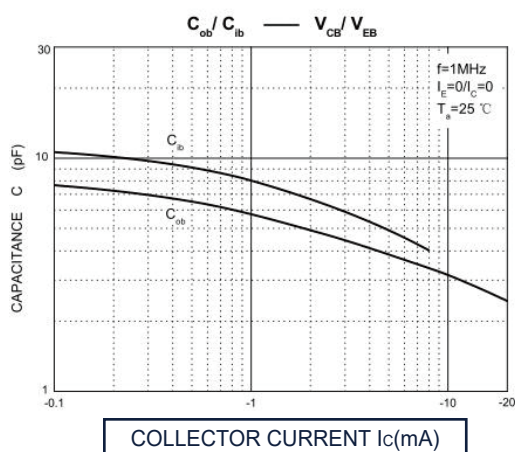
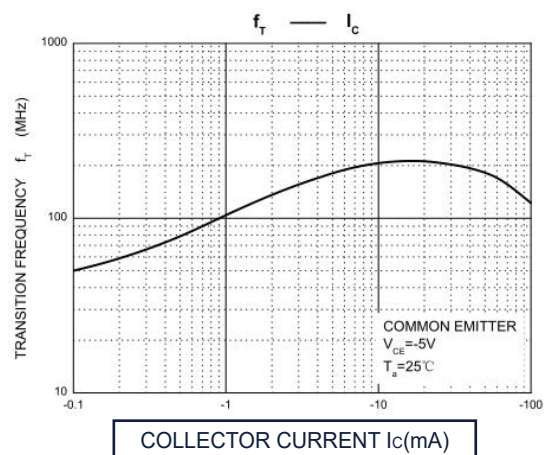
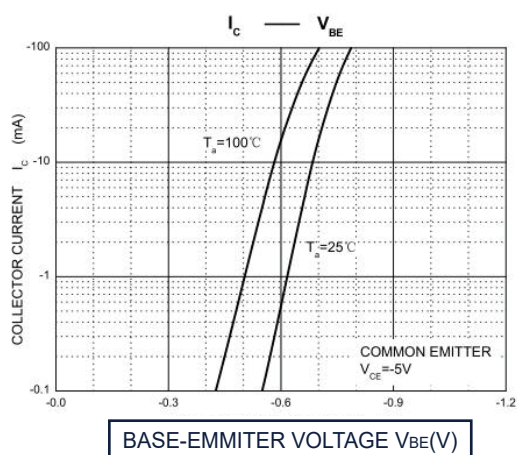
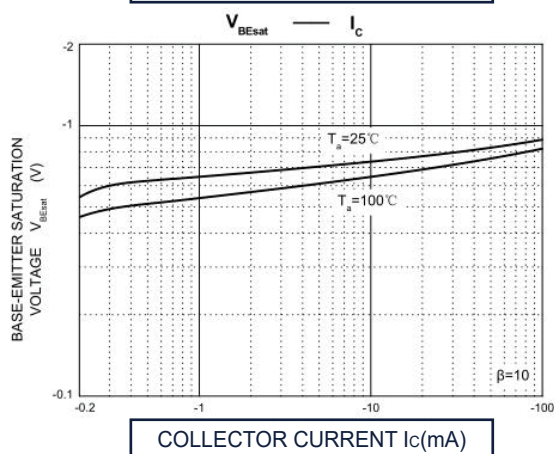
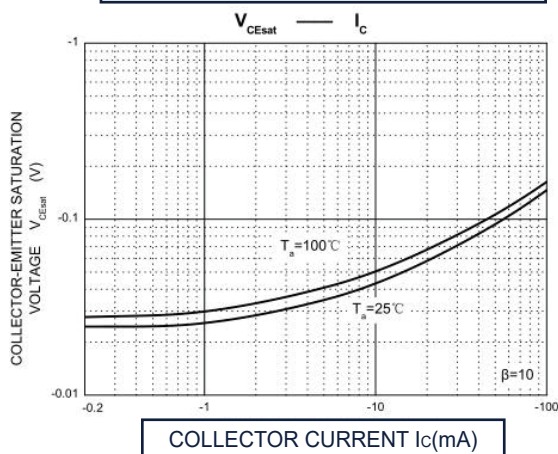
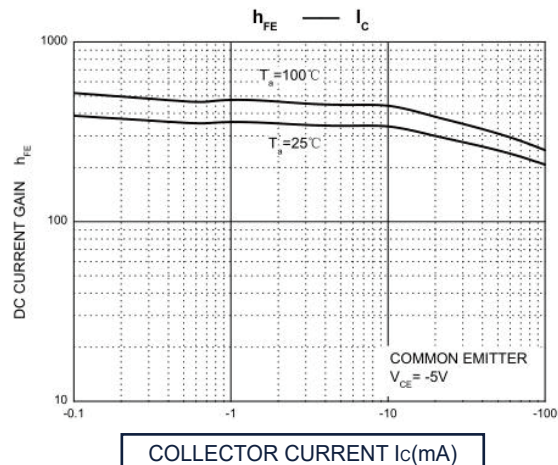
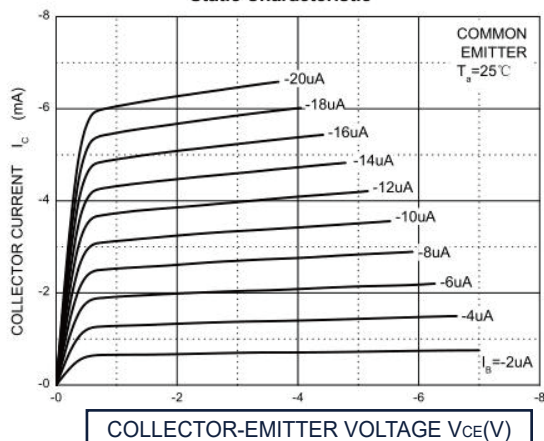
Ordering information

Product ID	Pack	Naming rule	Marking	hFE(1)	Qty(PCS)
BC857B	SOT23	BC857B 产品名称 product name	3F	220~475	3000



Typical Characteristics

Static Characteristic





SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°