



BC856/BC857/BC858

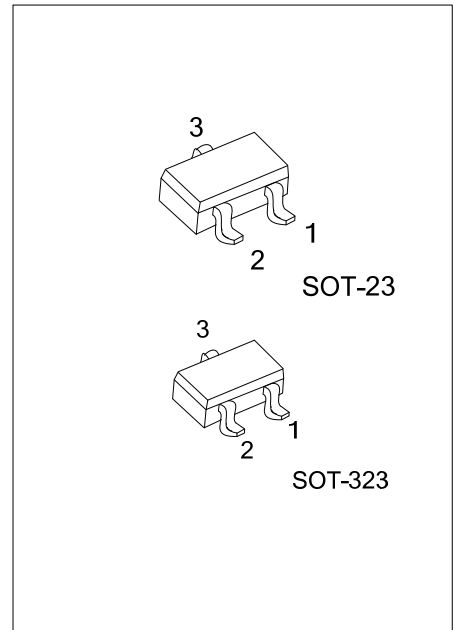
PNP SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

■ **FEATURES**

*Suitable for automatic insertion in thick and thin-film circuits

*Complement to BC846/BC847/BC848



■ **ORDERING INFORMATION**

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free	Halogen Free		1	2	3	
BC856-x-AE3-R	BC856L-x-AE3-R	BC856G-x-AE3-R	SOT-23	E	B	C	Tape Reel
BC857-x-AE3-R	BC857L-x-AE3-R	BC857G-x-AE3-R	SOT-23	E	B	C	Tape Reel
BC858-x-AE3-R	BC858L-x-AE3-R	BC858G-x-AE3-R	SOT-23	E	B	C	Tape Reel
BC856-x-AL3-R	BC856L-x-AL3-R	BC856G-x-AL3-R	SOT-323	E	B	C	Tape Reel
BC857-x-AL3-R	BC857L-x-AL3-R	BC857G-x-AL3-R	SOT-323	E	B	C	Tape Reel
BC858-x-AL3-R	BC858L-x-AL3-R	BC858G-x-AL3-R	SOT-323	E	B	C	Tape Reel

<p>BC856L-x-AE3-R</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Plating</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23, AL3: SOT-323 (3) x: refer to Classification of h_{FE} (4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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■ **MARKING(SOT-23/SOT-323)**

BC856	BC857	BC858

X: Rank Code, refer to Classification of h_{FE}

□: L: Lead Free, G: Halogen Free

BC856/BC857/BC858

PNP SILICON TRANSISTOR

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	BC856	-80	V
	BC857	-50	V
	BC858	-30	V
Collector-Emitter Voltage	BC856	-65	V
	BC857	-45	V
	BC858	-30	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Dissipation	P _D	310	mW
Collector Current (DC)	I _C	-100	mA
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-40 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

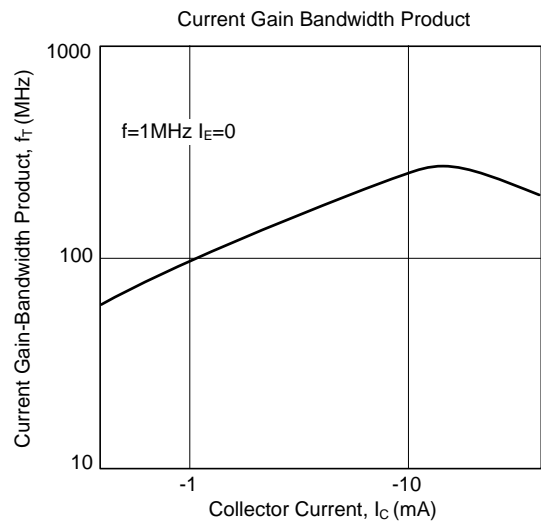
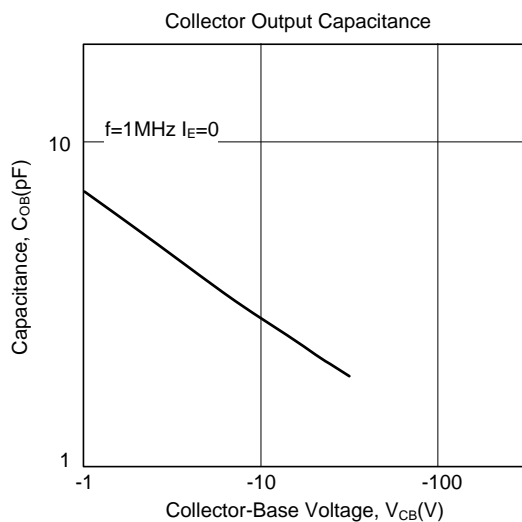
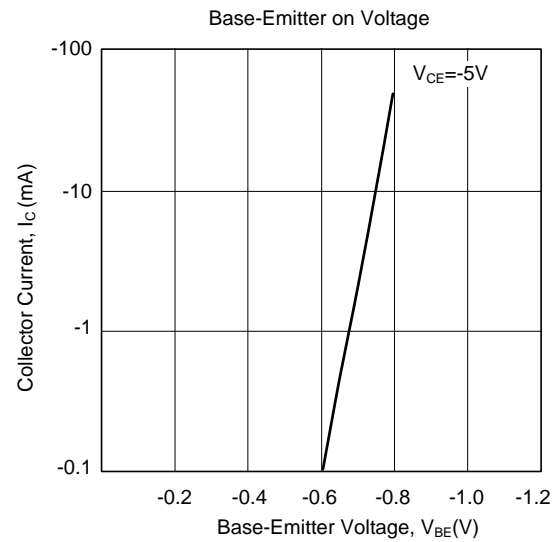
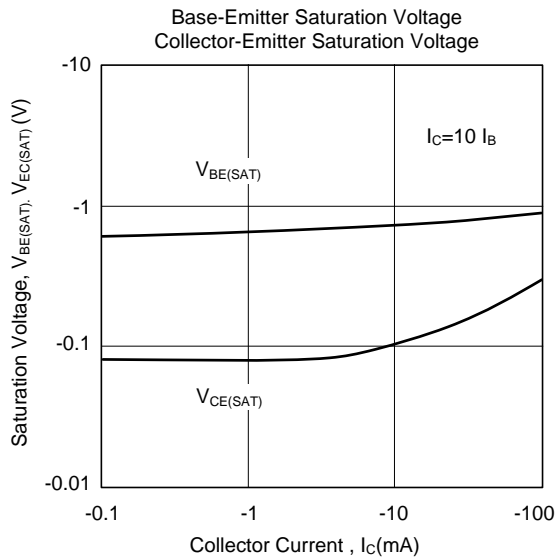
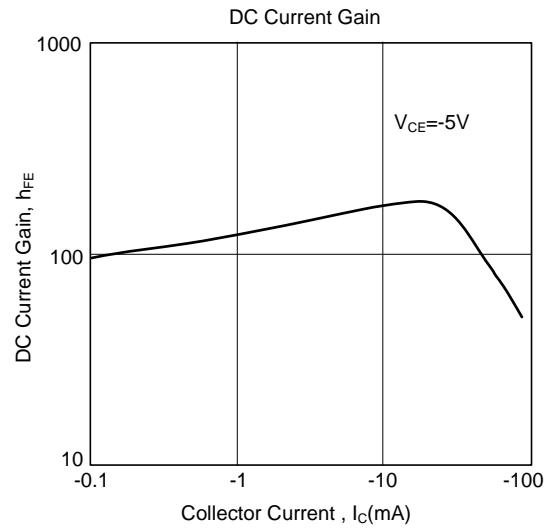
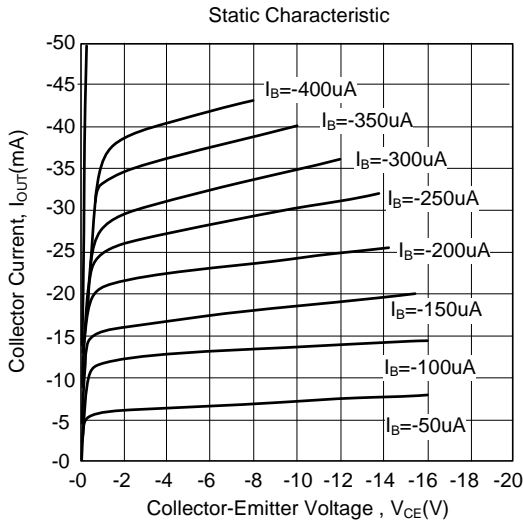
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I _{CBO}	V _{CB} =-30V, I _E =0			-15	nA
DC Current Gain	h _{FE}	V _{CE} =-5V, I _C =-2mA	110		800	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =-10mA, I _B =-0.5mA		-90	-300	mV
		I _C =-100mA, I _B =-5mA		-250	-650	mV
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =-10mA, I _B =-0.5mA		-700		mV
		I _C =-100mA, I _B =-5mA		-900		mV
Base-Emitter On Voltage	V _{BE(ON)}	V _{CE} =-5V, I _C =-2mA	-600	-660	-750	mV
		V _{CE} =-5V, I _C =-10mA			-800	mV
Current Gain Bandwidth Product	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz		150		MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF
Noise Figure	NF	V _{CE} =-5V, I _C =-200μA, f=1KHz, R _G =2KΩ		2	10	dB

■ CLASSIFICATION OF h_{FE}

RANK	A	B	C
RANGE	110-220	200-450	420-800

TYPICAL CHARACTERISTICS



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