



BC857BS

PNP SILICON TRANSISTOR

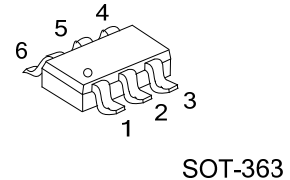
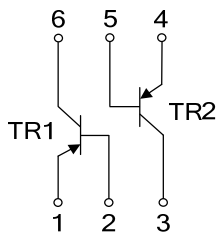
SWITCHING AND AMPLIFIER APPLICATIONS

FEATURES

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

*Complement to BC847BS

EQUIVALENT CIRCUIT



SOT-363

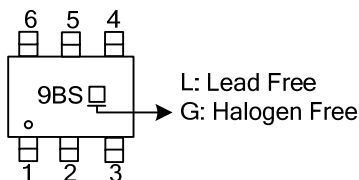
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
BC857BSL-AL6-R	BC857BSG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

Note: Pin Assignment: G: Gate D: Drain S: Source

BC857BSG-AL6-R		(1)Packing Type	(1) R: Tape Reel
		(2)Package Type	(2) AL6: SOT-363
		(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Dissipation	P_D	200	mW
Collector Current (DC)	I_C	-100	mA
Junction Temperature	T_J	+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^{\circ}\text{C}$

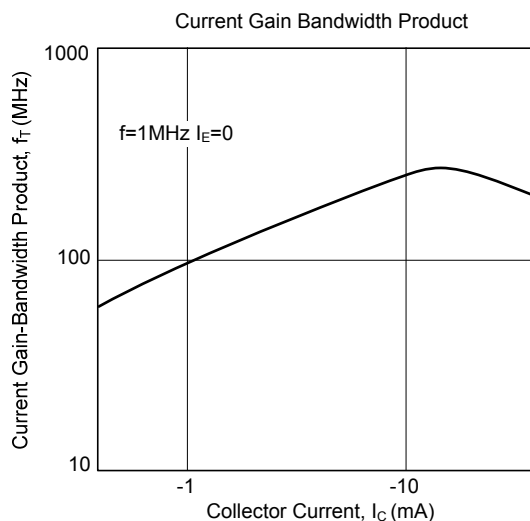
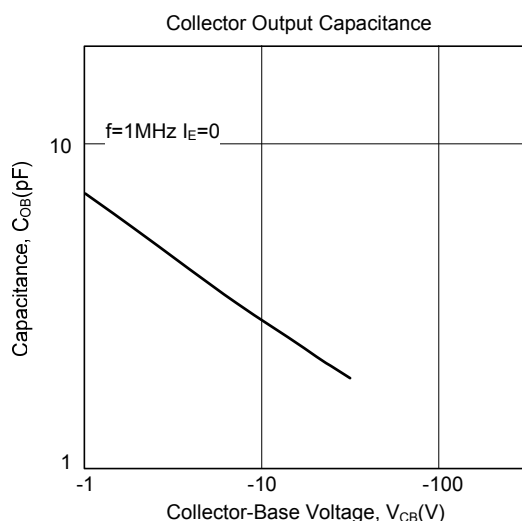
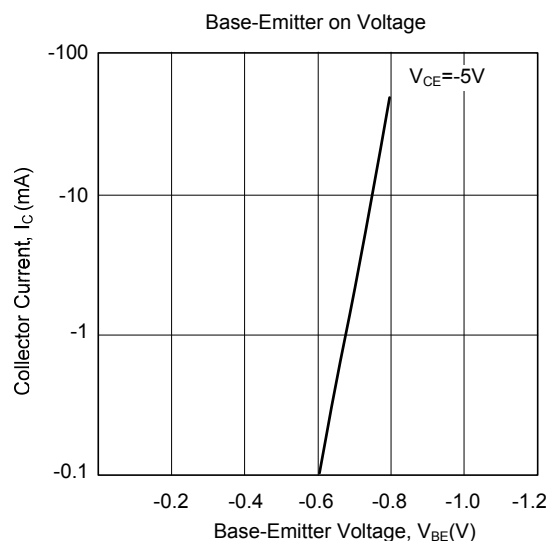
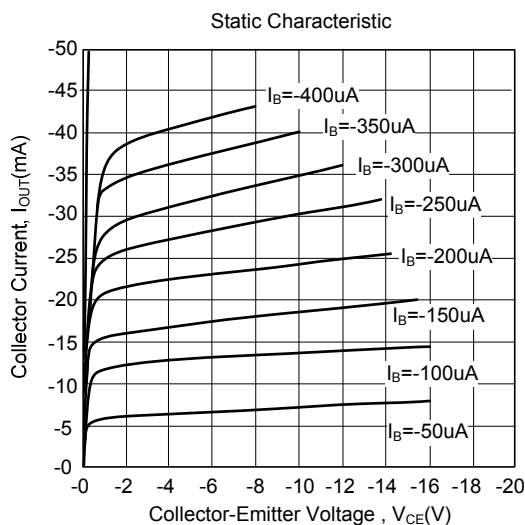
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30\text{V}, I_E=0$			-15	nA
DC Current Gain	h_{FE}	$V_{CE}=-5\text{V}, I_C=-2\text{mA}$	200		450	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$			-100	mV
		$I_C=-100\text{mA}, I_B=-5\text{mA}$			-400	mV
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$		-700		mV
		$I_C=-100\text{mA}, I_B=-5\text{mA}$		-900		mV
Base-Emitter On Voltage	$V_{BE(ON)}$	$V_{CE}=-5\text{V}, I_C=-2\text{mA}$	-600	-660	-750	mV
		$V_{CE}=-5\text{V}, I_C=-10\text{mA}$			-800	mV
Current Gain Bandwidth Product	f_T	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$		150		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			6	pF
Noise Figure	NF	$V_{CE}=-5\text{V}, I_C=-200\mu\text{A}, f=1\text{KHz}, R_G=2\text{K}\Omega$		2	10	dB

■ TYPICAL CHARACTERISTICS



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