

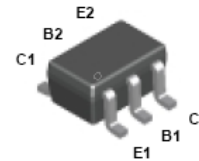
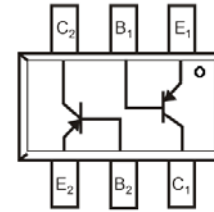


FEATURES

- Epitaxial planar die construction
- Complementary NPN type available BC847S
- Ultra-small surface mount package

APPLICATIONS

- For Low power amplification and switching



SOT-363

ORDERING INFORMATION

Type No.	Marking	Package Code
BC857S	3C	SOT-363

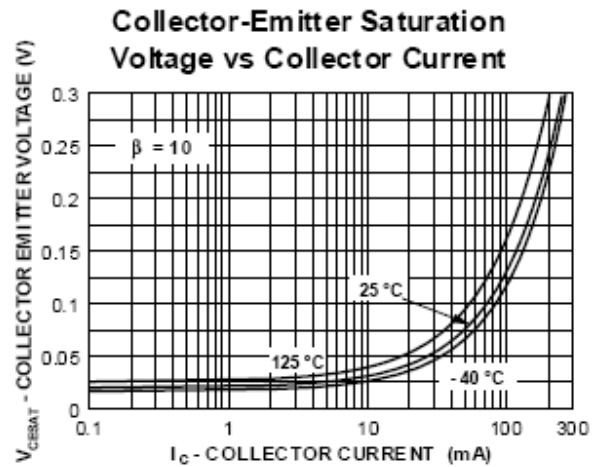
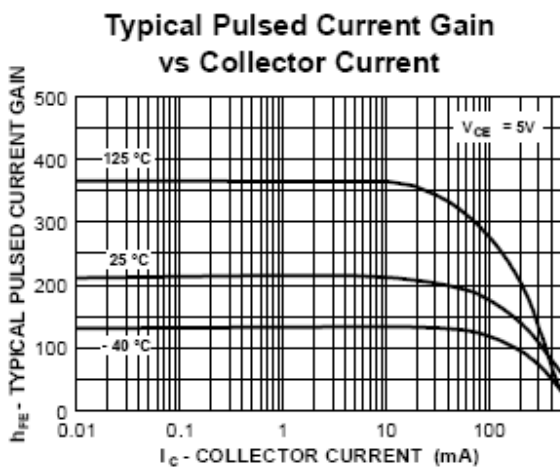
MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-200	mA
P_D	Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	415	°C/W
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-50	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-45	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=-30V, I_E=0$ $V_{CB}=-30V, I_E=0, T_A=150^\circ C$	-	-15 -4.0	nA μA
DC current gain	h_{FE}	$V_{CE}=-5V, I_C=-2.0mA$	125	630	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-10mA, I_B=-0.5mA$ $I_C=-100mA, I_B=-5.0mA$	-	-0.3 -0.65	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=-2.0mA, V_{CE}=-5.0V$ $I_C=-10mA, V_{CE}=-5.0V$	-0.6	-0.75 -0.82	V
Transition frequency	f_T	$V_{CB}=-5.0V, I_C=-10mA, f=100MHz$	200		MHz
Output Capacitance	C_{obo}	$V_{CB}=-10V, f=1.0MHz$	-	3.5	pF
Noise figure	NF	$I_C=0.2mA, V_{CE}=5.0, R_S=2.0K\Omega,$ $f=1.0kHz, BW=200Hz$		2.5	dB

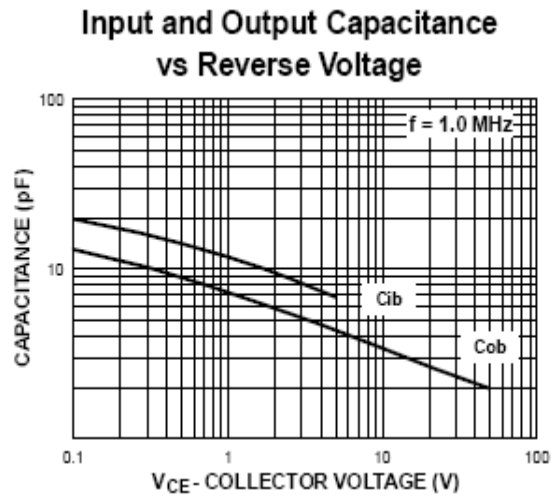
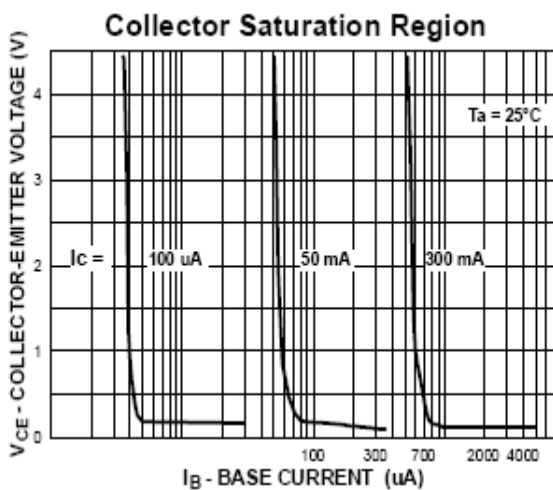
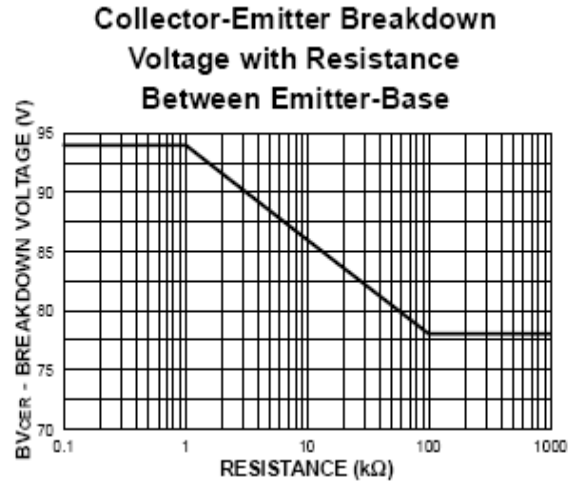
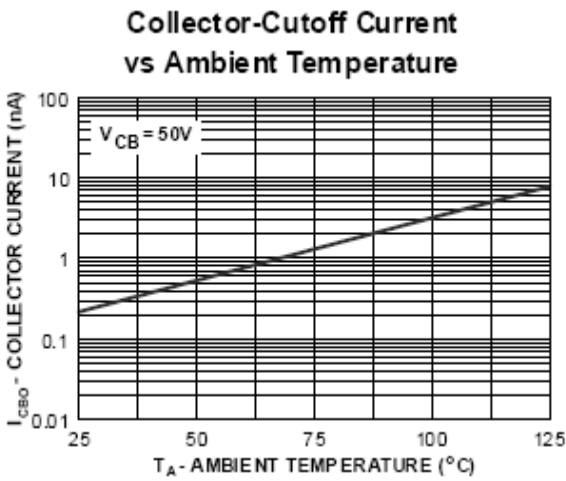
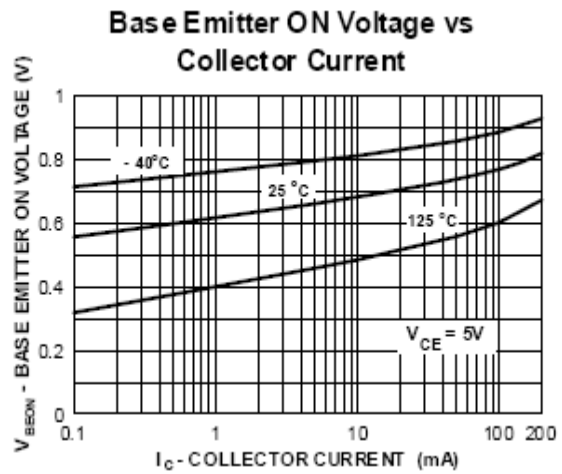
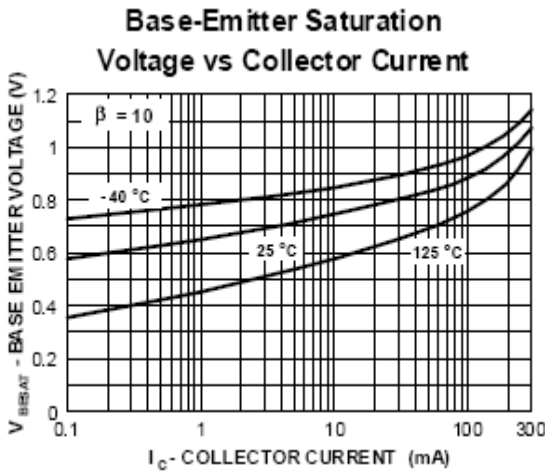
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





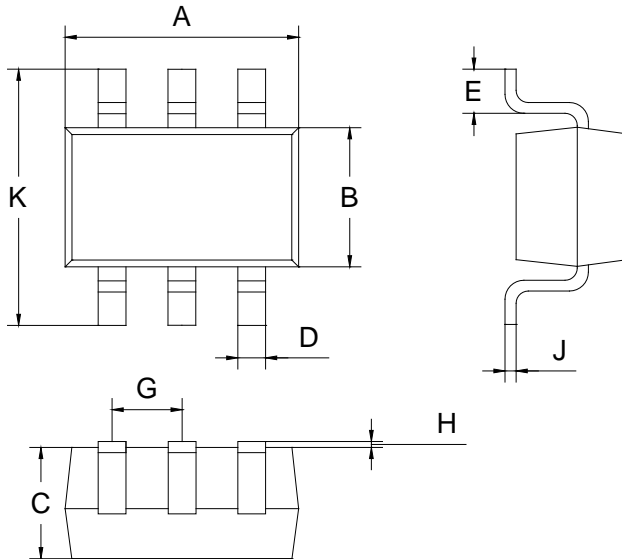
BC857S

Dual Bipolar Transistor(PNP+PNP)



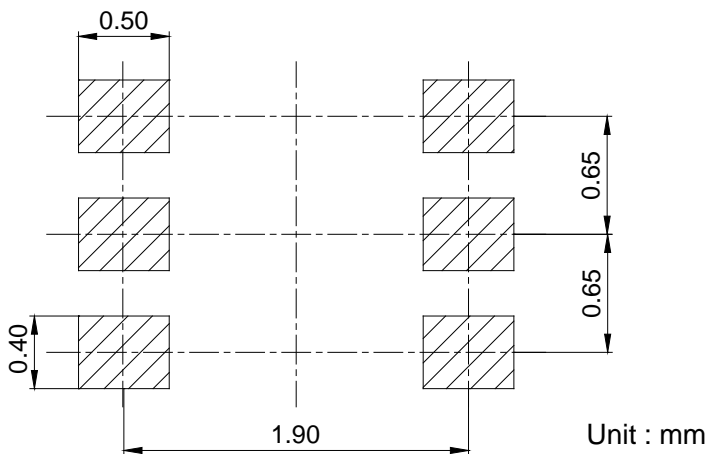
PACKAGE OUTLINE

Plastic surface mounted package



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BC857S	SOT-363	3000 pcs / Tape & Reel