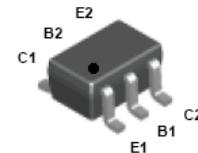
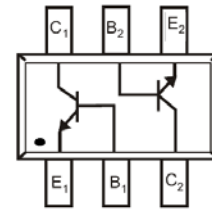




FEATURES

- Epitaxial planar die construction.
- Ultra-small surface mount package.



SOT-363

APPLICATIONS

- Dual NPN small signal surface mount transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
BC847S	1C	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	6	V
I_C	Collector Current -Continuous	200	mA
P_D	Power Dissipation Derate above 25°C	300	mW
		2.4	mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	415	°C/W
T_J, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



BC847S

Dual Bipolar Transistor(NPN+NPN)

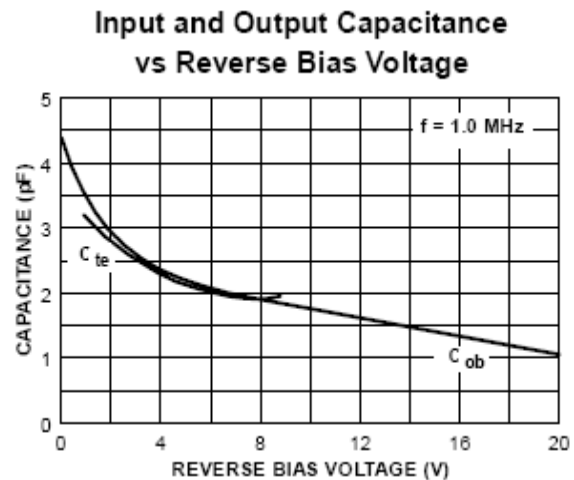
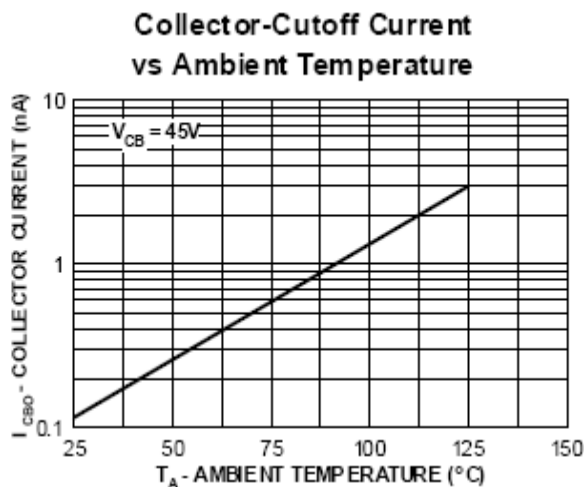
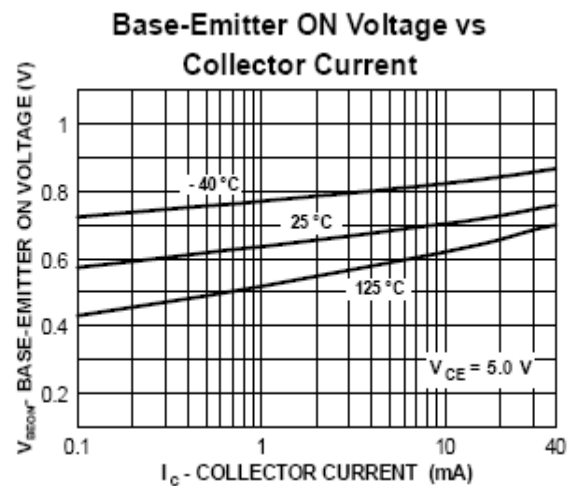
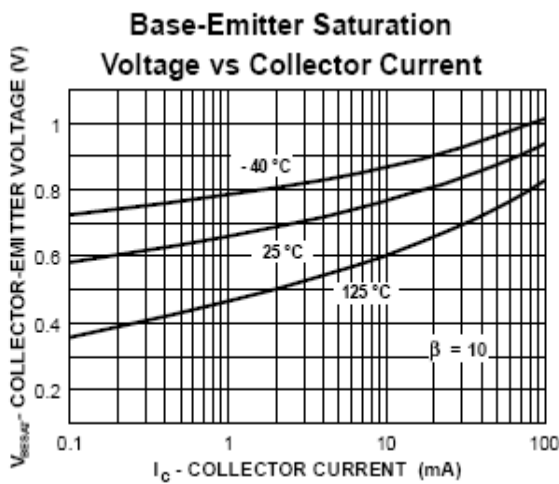
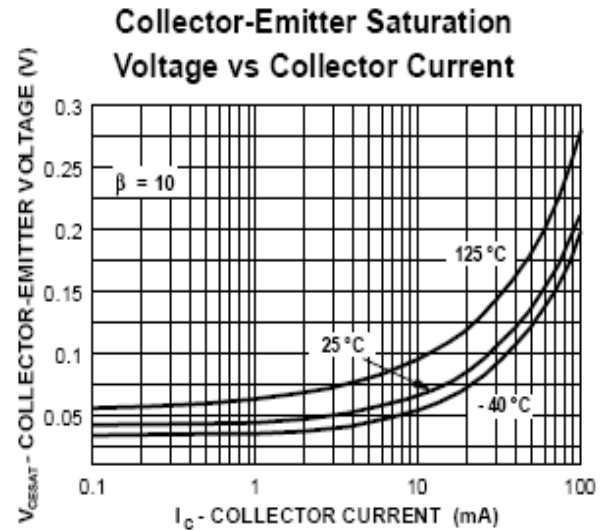
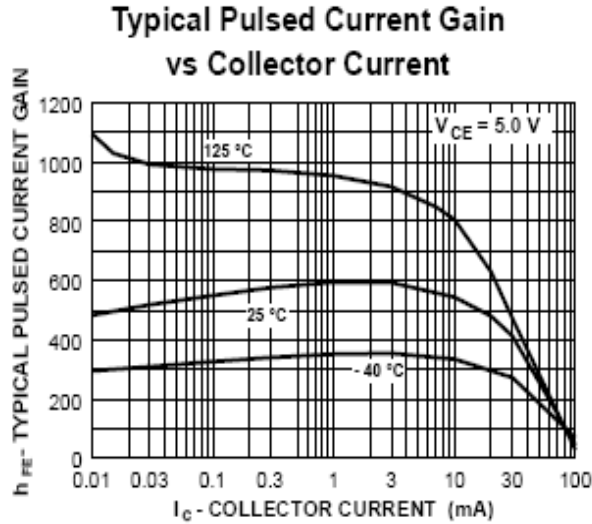


ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A } I_E=0$	50	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA } I_B=0$	45	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A } I_C=0$	6	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{V } I_E=0$ $V_{CB}=30\text{V } I_E=0 T_A=150^{\circ}\text{C}$	-	15 5.0	nA μA
DC current gain	h_{FE}	$V_{CE}=5\text{V } I_C=2.0\text{mA}$	110	630	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA } I_B=0.5\text{mA}$ $I_C=100\text{mA } I_B=5.0\text{mA}$	-	0.25 0.65	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=2.0\text{mA}, V_{CE}=5.0\text{V}$ $I_C=10\text{mA}, V_{CE}=5.0\text{V}$	0.58 -	0.7 0.77	V
Transition frequency	f_T	$V_{CE}=5.0\text{V}, I_C=20\text{mA}, f=100\text{MHz}$	200		MHz
Output Capacitance	C_{obo}	$V_{CB}=10\text{V}, f=1.0\text{MHz}, I_E=0$	-	2	pF



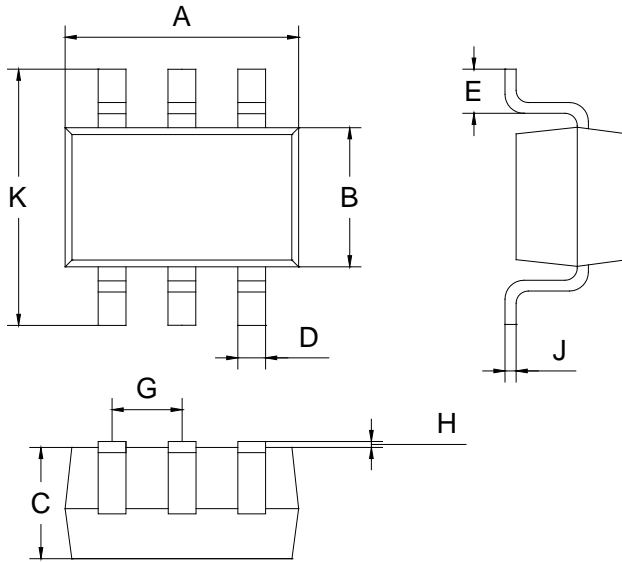
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





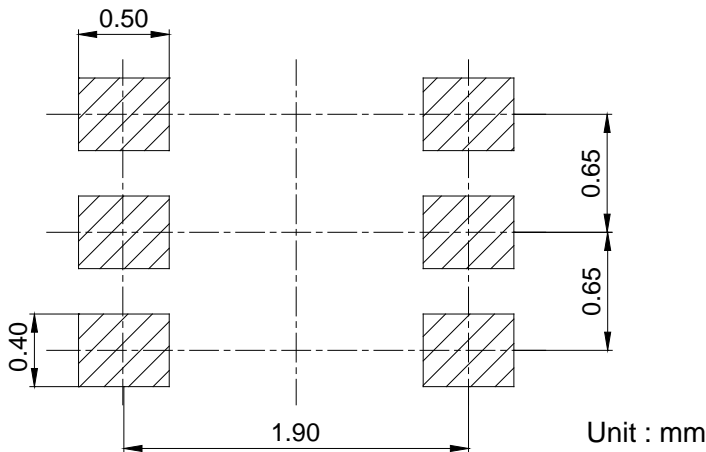
PACKAGE OUTLINE

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
BC847S	SOT-363	3000 pcs/ Tape & Reel