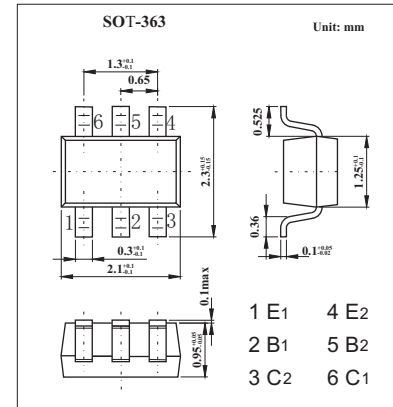
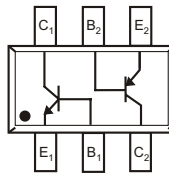


## NPN/PNP Complementary Silicon Transistor Array BC847PN

### ■ Features

- Two internal isolated NPN/PNP Transistors in one package
- For Switching and AF Amplifier Applications
- Ultra-Small Surface Mount Package



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	50	V
Collector-Emitter Voltage	$V_{CE0}$	45	V
Emitter-Base Voltage	$V_{EB0}$	6	V
Collector Current -Continuous	$I_C$	0.1	A
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	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-base cutoff current	$I_{CBO}$	$V_{CB} = 30\text{V}$ , $I_E = 0$			15	nA
Emitter-base cutoff current	$I_{EBO}$	$V_{EB} = 5\text{V}$ , $I_C = 0$			15	nA
DC current gain	$h_{FE}$	$V_{CE} = 5\text{V}$ , $I_C = 2\text{mA}$	200		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{mA}$ , $I_B = 5\text{mA}$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100\text{mA}$ , $I_B = 5\text{mA}$		0.9		V
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, f=1\text{MHz}$			6	pF
Transition frequency	$f_T$	$V_{CE} = 5\text{V}$ , $I_C = 10\text{mA}$ , $f = 100\text{MHz}$	100			MHz
Noise figure	NF	$V_{CE}=5\text{V}, I_C=0.2\text{mA}, f=1\text{kHz}$ , $R_g=2\text{K}\Omega, \Delta f=200\text{Hz}$			10	dB

### ■ Marking

Marking	7P
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