

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

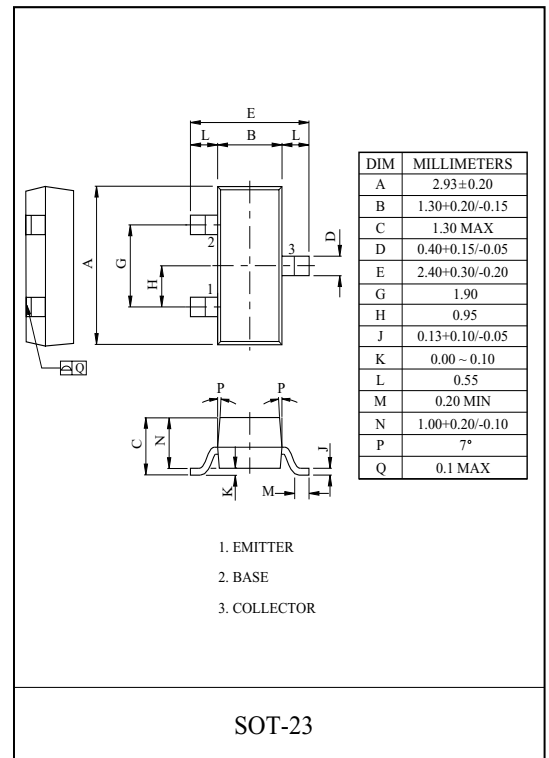
### FEATURES

- For Complementary With PNP Type BC859/860.

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BC849	$V_{CBO}$	30	V
	BC850		50	
Collector-Emitter Voltage	BC849	$V_{CEO}$	30	V
	BC850		45	
Emitter-Base Voltage		$V_{EBO}$	5	V
Collector Current		$I_C$	100	mA
Collector Power Dissipation		$P_C^*$	350	mW
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

$P_C^*$  : Package Mounted On 99.5% Alumina 10 × 8 × 0.6mm.



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BC849	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30	-	-	V
	BC850			45	-	-	
Collector-Base Breakdown Voltage	BC849	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30	-	-	V
	BC850			50	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5	-	-	V
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=30V, I_E=0$	-	-	15	nA
DC Current Gain		$h_{FE}(\text{Note})$	$I_C=2mA, V_{CE}=5V$	200	-	800	
Base-Emitter Voltage	$V_{BE(ON)1}$		$I_C=2mA, V_{CE}=5V$	0.58	0.66	0.7	V
	$V_{BE(ON)2}$		$I_C=10mA, V_{CE}=5V$	-	-	0.77	
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$		$I_C=10mA, I_B=0.5mA$	-	0.09	0.25	V
	$V_{CE(sat)2}$		$I_C=100mA, I_B=5mA$	-	0.2	0.6	
Base-Emitter Saturation Voltage	$V_{BE(sat)1}$		$I_C=10mA, I_B=0.5mA$	-	0.7	-	V
	$V_{BE(sat)2}$		$I_C=100mA, I_B=5mA$	-	0.9	-	
Transition Frequency		$f_T$	$I_C=10mA, V_{CE}=5V, f=100MHz$	-	300	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	2.5	4.5	pF
Noise Figure	BC849	NF	$I_C=200\mu A, V_{CE}=5V$ $R_g=10k, f=1kHz$	-	-	4.0	dB
	BC850			-	-	1.0	

Note :  $h_{FE}$  Classification B:200 450, C:420 800

### MARK SPEC

TYPE	BC849B	BC849C	BC850B	BC850C
MARK	2B	2C	2F	2G

### Marking

