

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- For Complementary With PNP Type BC859/860.
- Suffix U : Qualified to AEC-Q101.
ex) BC850-B-RTK/PU

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	°C
Storage Temperature Range		T _{stg}	-55 ~ 150	°C

P_C* : Package Mounted On 99.5% Alumina 10 x 8 x 0.6mm.

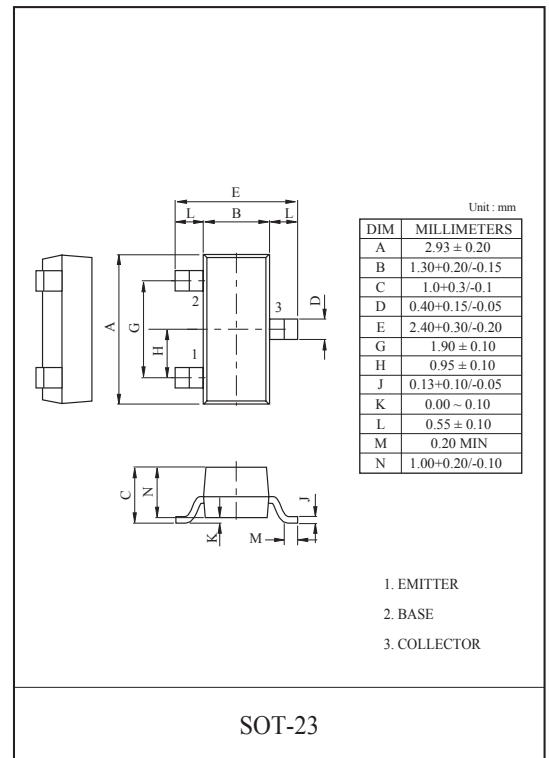
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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 =10μA, I _E =0	30	-	-	V
	BC850			50	-	-	
Emitter-Base Breakdown Voltage		V _{(BR)EBO}	I _E =10μA, I _C =0	5	-	-	V
Collector Cut-off Current		I _{CBO}	V _{CB} =30V, I _E =0	-	-	15	nA
DC Current Gain		h _{FE} (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 =200μA, V _{CE} =5V	-	-	4.0	dB
	BC850		R _g =10kΩ, f=1kHz	-	-	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

