

Description

- General purpose transistor

Feature

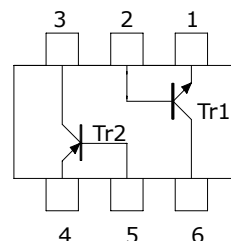
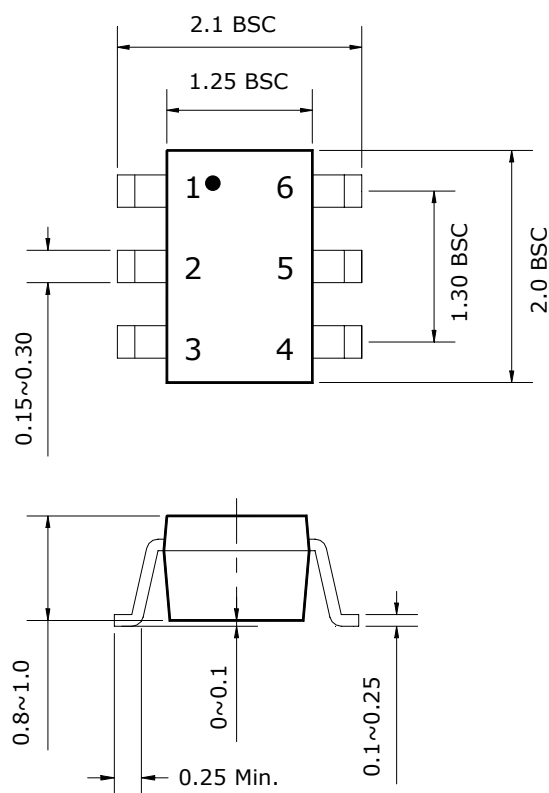
- Both 2SA1980 chip and 2SC5343 chip in SOT-363 package

Ordering Information

Type NO.	Marking	Package Code
SUT483J	3X	SOT-363

Outline Dimensions

unit : mm



PIN Connections

1. Emitter 1
2. Base 1
3. Collector 2
4. Emitter 2
5. Base 2
6. Collector 1

Absolute maximum ratings (Tr1, Tr2)

Ta=25°C

Characteristic	Symbol	Ratings		Unit
		Tr1	Tr2	
Collector-Base voltage	V _{CBO}	60	-50	V
Collector-Emitter voltage	V _{CEO}	50	-50	V
Emitter-base voltage	V _{EBO}	5	-5	V
Collector current	I _C	150	-150	mA
Collector dissipation	P _C	150		mW
Junction temperature	T _j	150		°C
Storage temperature range	T _{stg}	-55~150		°C

Electrical Characteristics (Tr1 : NPN)

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV _{CBO}	I _C =100μA, I _E =0	60	-	-	V
Collector-Emitter breakdown voltage	BV _{CEO}	I _C =1mA, I _B =0	50	-	-	V
Emitter-Base breakdown voltage	BV _{EBO}	I _E =10μA, I _C =0	5	-	-	V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0	-	-	0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0	-	-	0.1	μA
DC current gain	h _{FE}	V _{CE} =6V, I _C =2mA	70	-	700	-
Collector-Emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA	-	-	0.25	V
Transition frequency	f _T	V _{CE} =10V, I _C =1mA, f=100MHz	80	-	-	MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz	-	2	3.5	pF

Electrical Characteristics (Tr2 : PNP)

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV _{CBO}	I _C =-100μA, I _E =0	-50	-	-	V
Collector-Emitter breakdown voltage	BV _{CEO}	I _C =-1mA, I _B =0	-50	-	-	V
Emitter-Base breakdown voltage	BV _{EBO}	I _E =-10μA, I _C =0	-5	-	-	V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0	-	-	-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0	-	-	-0.1	μA
DC current gain	h _{FE}	V _{CE} =-6V, I _C =-2mA	120	-	400	-
Collector-Emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B =-10mA	-	-	-0.3	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-1mA, f=100MHz	80	-	-	MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz	-	4	7	pF

Electrical Characteristic Curves

Tr1 : NPN

Fig. 1 I_C - V_{BE}

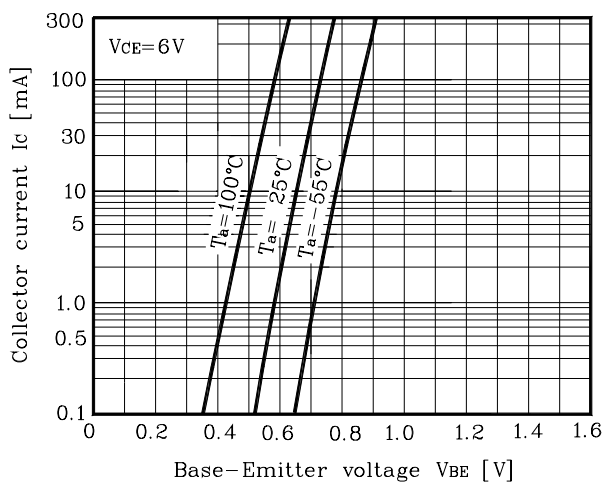


Fig. 2 I_C - V_{CE}

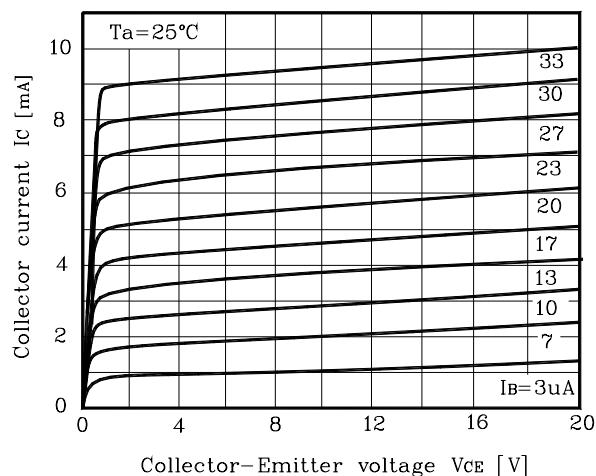


Fig. 3 h_{FE} - I_C

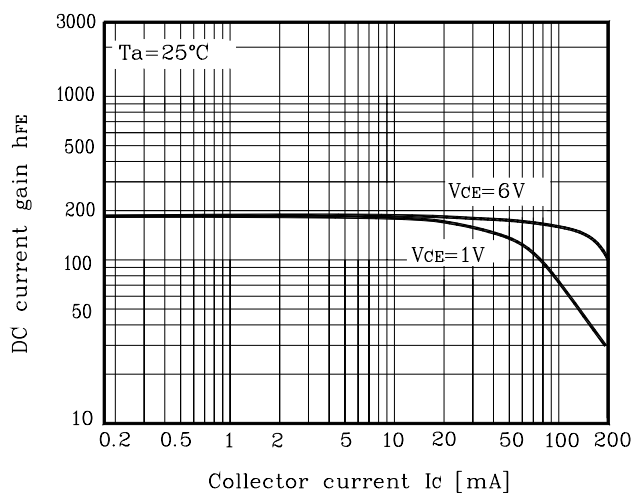
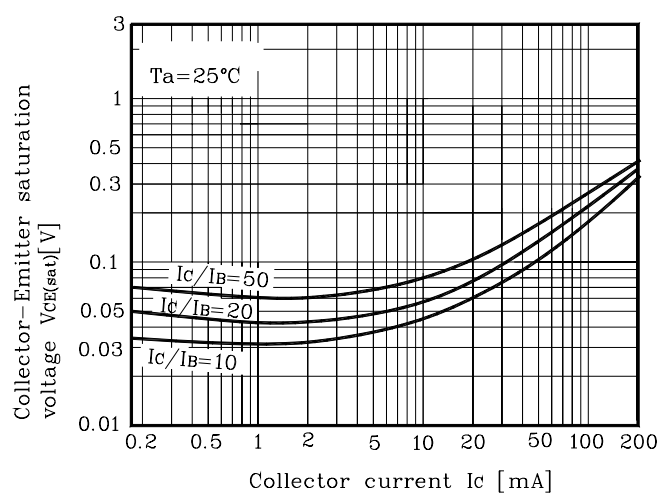


Fig. 4 $V_{CE(sat)}$ - I_C



Tr2 : PNP

Fig. 1 I_C - V_{BE}

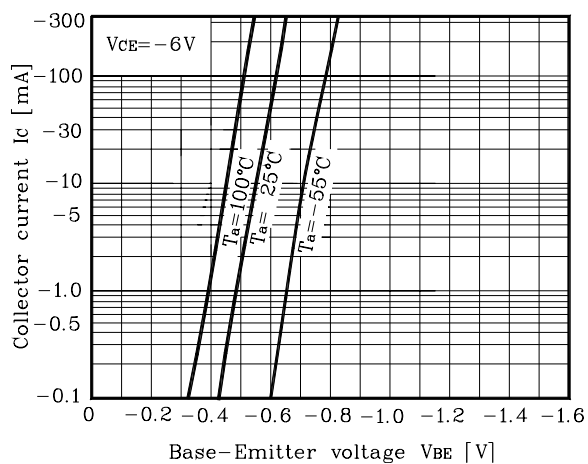
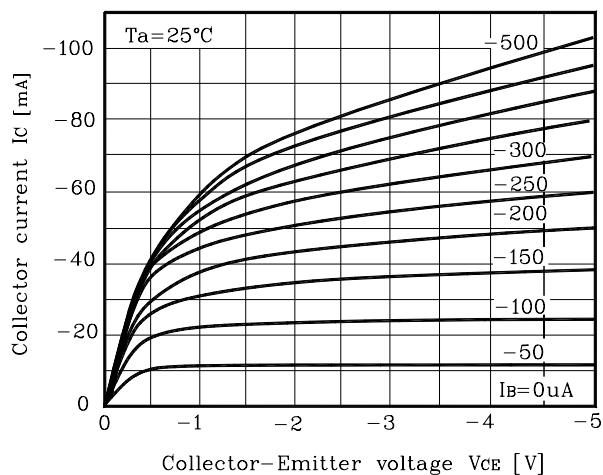
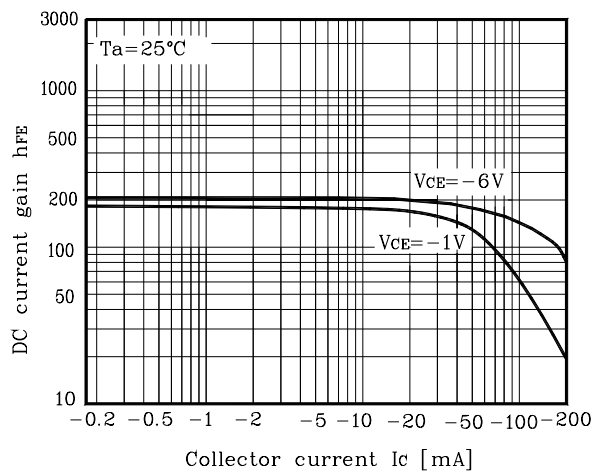
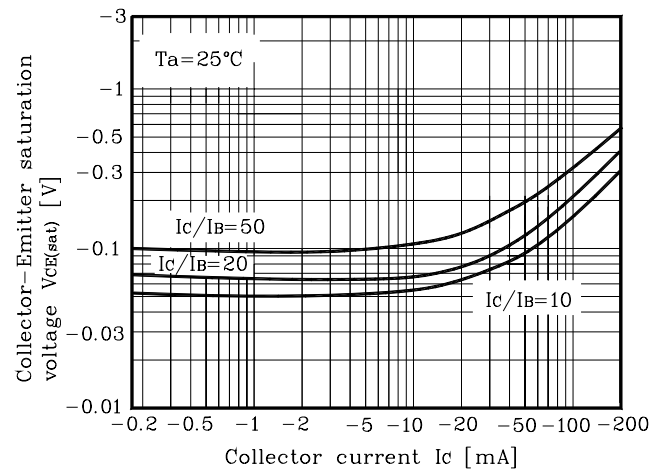


Fig. 2 I_C - V_{CE}



Electrical Characteristic Curves

Fig. 3 h_{FE} - I_C Fig. 4 $V_{CE(sat)}$ - I_C 

These AUK products are intended for usage in general electronic equipments(Office and communication equipment, measuring equipment, domestic electrification, etc.).

Please make sure that you consult with us before you use these AUK products in equipments which require high quality and/or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, traffic signal, combustion central, all types of safety device, etc.).

AUK cannot accept liability to any damage which may occur in case these AUK products were used in the mentioned equipments without prior consultation with AUK.