

Descriptions

- Complex type bipolar transistor

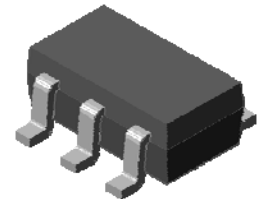
Features

- Reduce quantity of parts and mounting cost
- High collector power dissipation : $P_C=300\text{mW}(\text{Max.})$
- Two 2SC5343 chips in SOT-25 Package

Ordering Information

Type NO.	Marking	Package Code
SUT460M	X3□	SOT-25

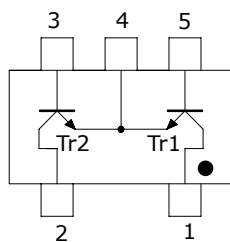
□ : Year & Week Code



Package : SOT-25

Equivalent circuit & PIN Connections

• Equivalent Circuit



PIN Connections

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

Absolute Maximum Ratings [Tr1, Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	150	mA
Collector power dissipation	P_C^*	300	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

※: Total rating

Electrical Characteristics [Tr1, Tr2]**(Ta=25°C)**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=1mA, I_B=0$	50	-	-	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}	$V_{CE}=6V, I_C=2mA$	120	-	400	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	-	-	0.25	V
Base-emitter voltage	V_{BE}	$V_{CE}=6V, I_C=2mA$	-	0.65	-	V
Transition frequency	f_T	$V_{CE}=10V, I_C=10mA$	-	200	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	2	-	pF

Electrical Characteristic Curves

[Tr1, Tr2]

Fig. 1 $I_C - V_{BE}$

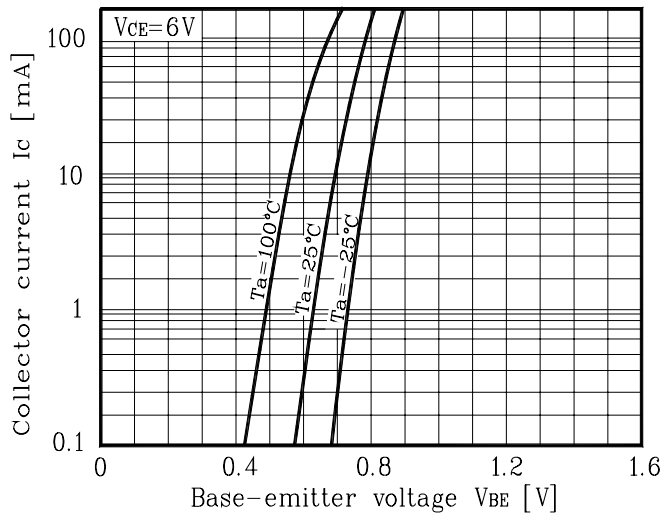


Fig. 2 $I_C - V_{CE}$

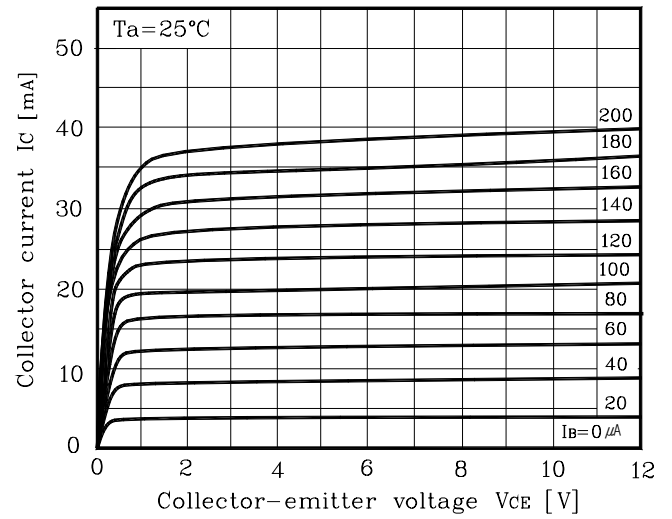


Fig. 3 $h_{FE} - I_C$

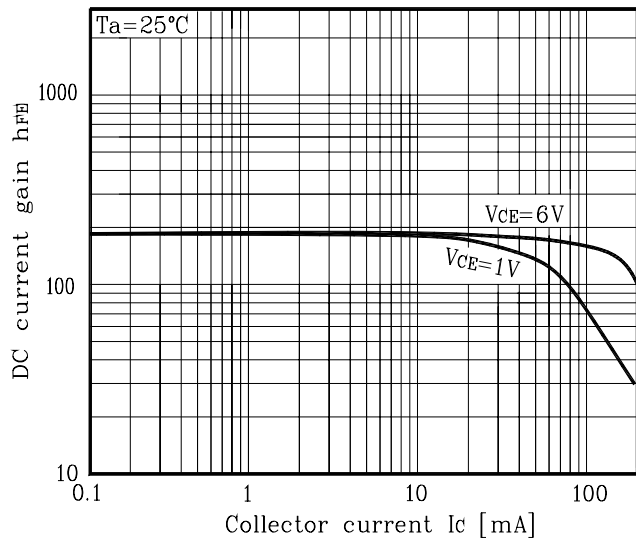


Fig. 4 $V_{CE(sat)} - I_C$

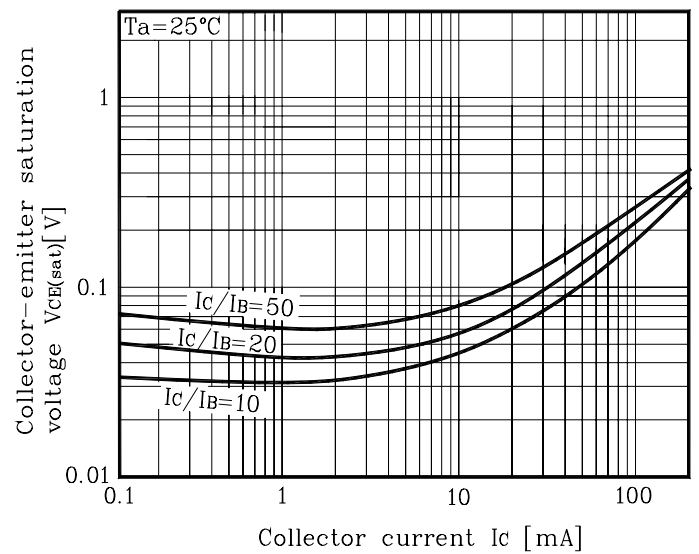
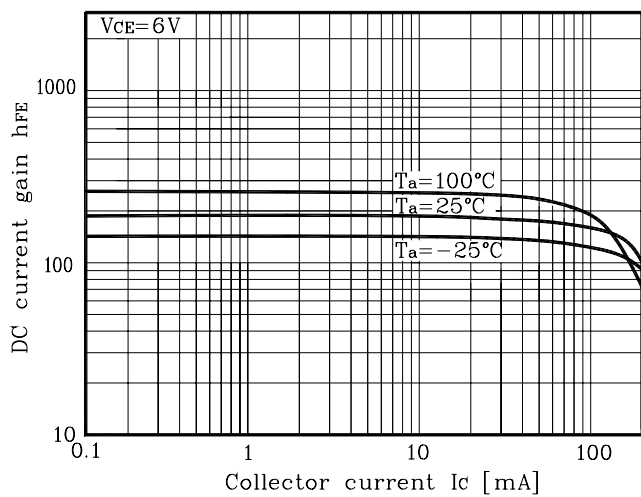
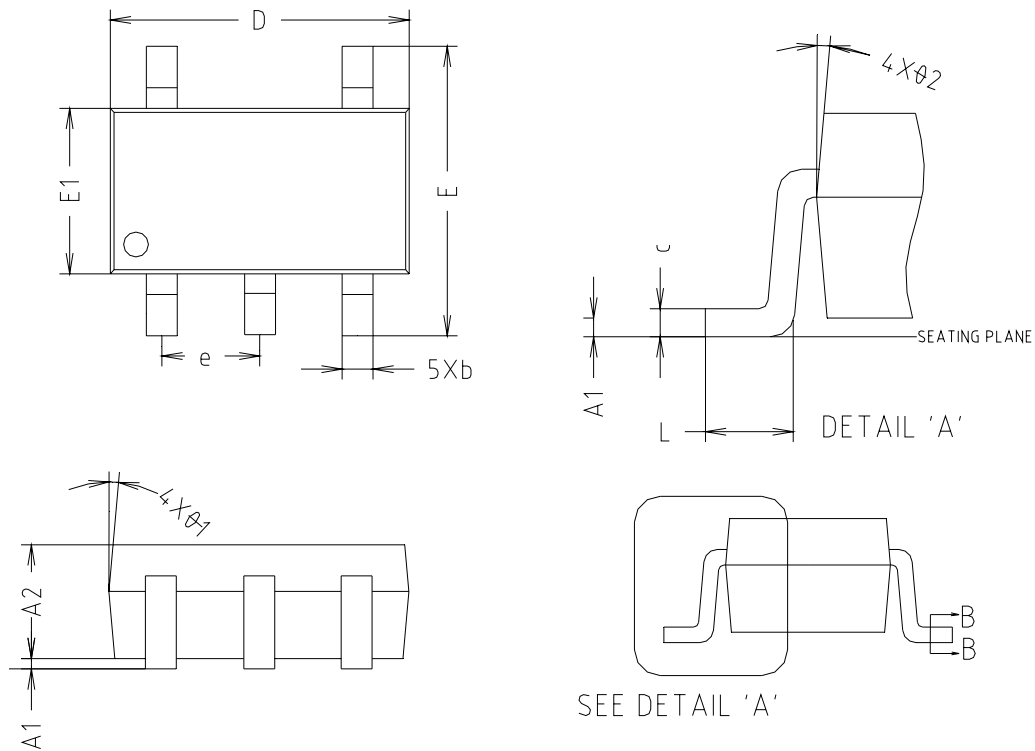


Fig. 5 $h_{FE} - I_C$

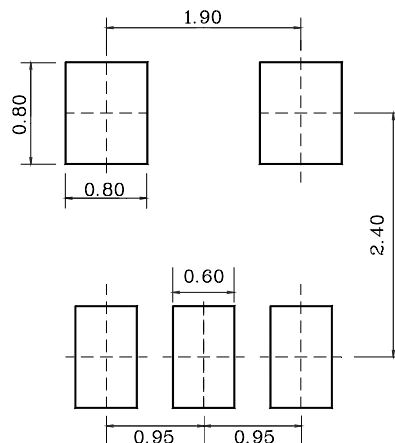


SOT-25 Outline Dimension(mm)



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A1	0.000	0.050	0.100	
A2	1.000	1.100	1.200	
c	0.110	0.150	0.190	
c1	0.085	0.125	0.165	
D	2.800	2.900	3.000	
E	2.600	2.800	3.000	
E1	1.500	1.600	1.700	
e	0.930	0.950	0.970	
L	0.400	-	-	
$\theta 1$		5° REF		
$\theta 2$		5° REF		

※ Recommend PCB solder land [Unit: mm]



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