

SUT460M

Epitaxial planar NPN silicon transistor

Descriptions

• Complex type bipolar transistor

Features

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

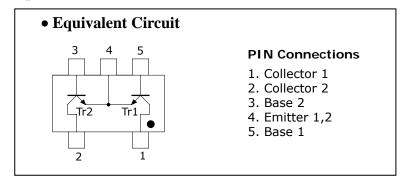
Package: SOT-25

Ordering Information

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

□: Year & Week Code

Equivalent circuit & PIN Connections



Absolute Maximum Ratings [Tr1, Tr2]

(Ta=25°C)

	<u>/</u>		(10 10 0)
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 ₃	150	°C
Storage temperature range	T _{stg}	-55~150	°C

***:** Total rating

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Electrical Characteristics [Tr1, Tr2]

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Collector-emitter breakdown voltage	BV _{CEO}	$I_C=1$ mA, $I_B=0$	50	-	-	V
Collector cut-off current	I _{CBO}	$V_{CB} = 60V, I_{E} = 0$	ı	ı	0.1	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0	ı	ı	0.1	μΑ
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⊤	V_{CE} =10V, I_{C} =10mA	-	200	-	MHz
Collector output capacitance	C _{ob}	V_{CB} =10V, I_E =0, f=1MHz	-	2	-	pF

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Electrical Characteristic Curves [Tr1, Tr2]

Fig. 1 I_C - V_{BE}

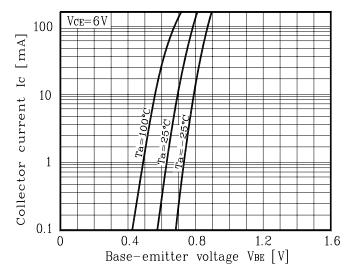


Fig. 3 h_{FE} - I_{C}

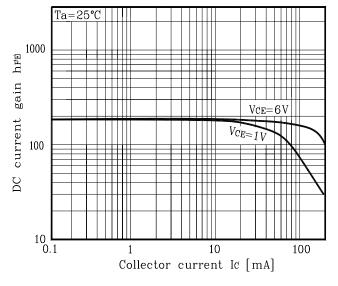


Fig. 5 h_{FE} - I_C

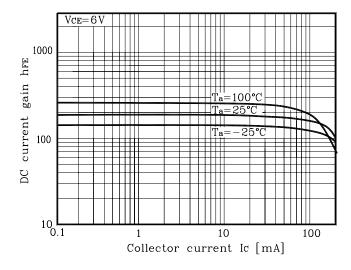


Fig. 2 $I_{\rm C}$ -V $_{\rm CE}$

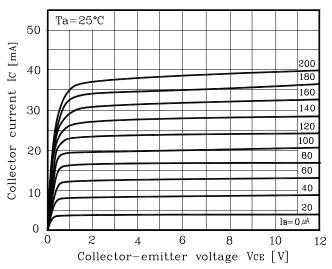
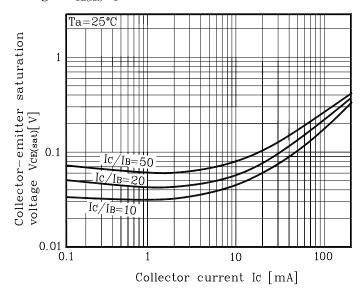
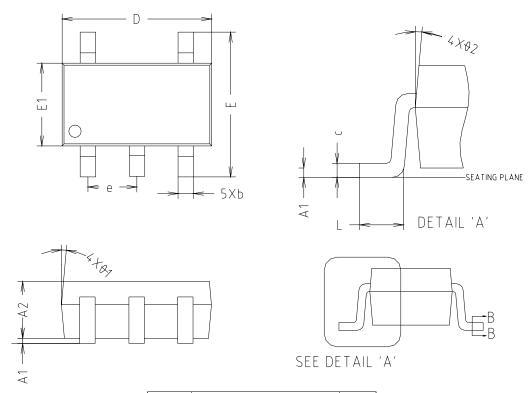


Fig. 4 $V_{CE(sat)}$ - I_{C}



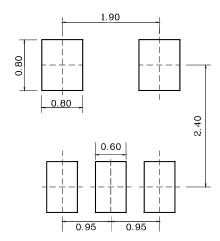
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SOT-25 Outline Dimension(mm)



SYMBOL	SYMBOL MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	1,012
Α1	0.000	0.050	0.100	
Α2	1.000	1.100	1.200	
С	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	
е	0.930	0.950	0.970	
L	0.400	-	-	
0 1		5° REF		
0 2		5° REF		

* Recommend PCB solder land [Unit: mm]



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