

SUT061G

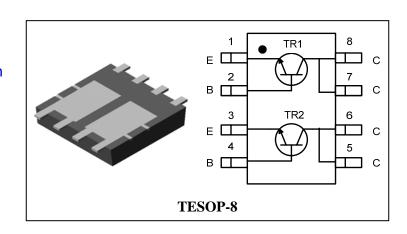
Dual NPN Bipolar transistor

Descriptions

- General purpose amplifier
- Recommended for LED Drive Application

Features

- Thermally Enhanced Power PKG
- Low saturation: $V_{CE}(sat) = 0.4V Max$
- 2 NPN chips in TESOP-8 Package



Ordering Information

Type NO.	Marking	Package Code
SUT061	SUT061□	TESOP-8

□: Year & Week Code

Absolute maximum ratings(TR1, TR2)

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	80	V
Collector-Emitter voltage	V_{CEO}	60	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_{C}	1	A(DC)
Collector current	I _{CP} *	2	A(Pulse)
	P _C (Ta=25°C) **	0.75	W/TOTAL
Collector power dissipation	P _C (1a=23 C) ***	0.55	W/ELEMENT
	P _C (Tc=25°C)	7.5	W/TOTAL
Junction temperature	T _J	150	°C
Storage temperature	T_{stg}	-55~150	°C

^{*:} Single pulse, tp= 300 μ s

Electrical Characteristics(TR1, TR2)

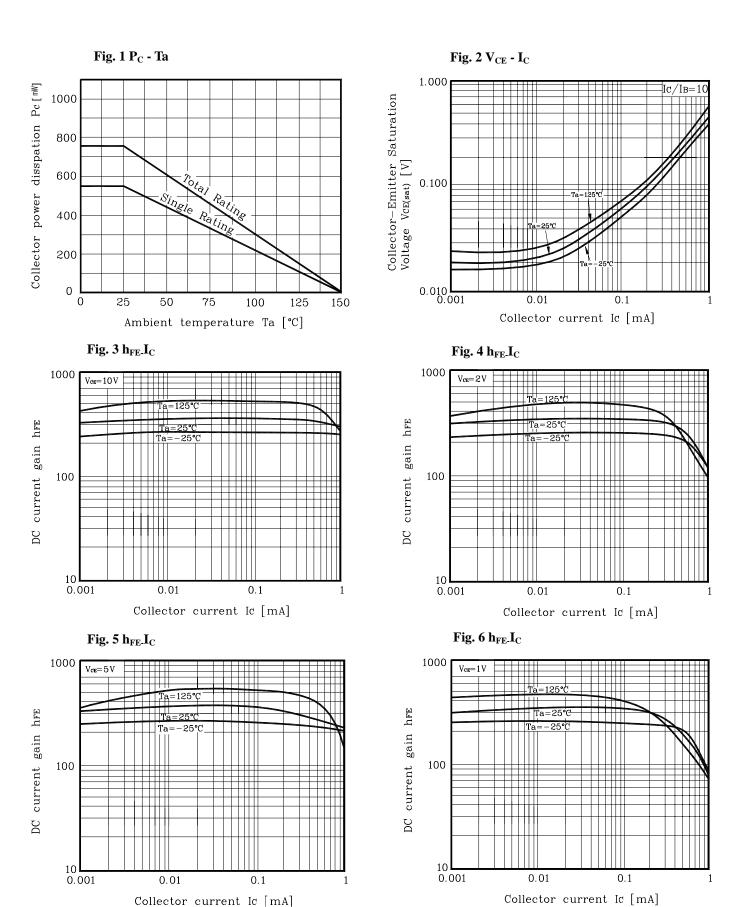
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	$I_C = 100 \mu A, I_E = 0$	80	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	$I_C=1$ mA, $I_B=0$	60	1	-	V
Emitter-Base breakdown voltage	BV_{EBO}	$I_E=10$ mA, $I_C=0$	5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_{E} = 0$	-	1	0.1	μΑ
Emitter cut-off current	I_{EBO}	$V_{EB}=5V$, $I_{C}=0$	-	ı	0.1	μА
DC current gain	h _{FE} 1)	V_{CE} =2V, I_{C} =100mA	200	ı	400	-
		$V_{CE}=2V$, $I_{C}=1A$	80	-	-	
Base-Emitter on voltage	$V_{BE(ON)}$	V_{CE} =2V, I_{C} =500mA	-	ı	1.2	٧
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C =500mA, I_B =50mA	-	-	0.4	V
Collector output capacitance	C _{ob}	$V_{CB}=10V$, $I_{E}=0$, $f=1MHz$	-	10	-	pF
Transition frequency	f_T	V_{CB} =10V, I_{C} =50mA	-	160	_	MHz

Note 1) hFE Rank: 200~400 only

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^{**:} Each terminal mounted on a recommended solder land

Electrical Characteristic Curves(TR1, TR2)



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Electrical Characteristic Curves

Fig. 7 Cob - V_{CB} 100 Collector Output Capacitance Cob [pF] f=1MHz10

Collector-Base voltage Vcb [V]

100



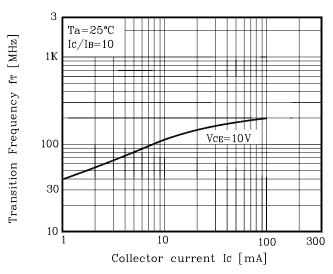


Fig. 8 I_C - V_{CE}

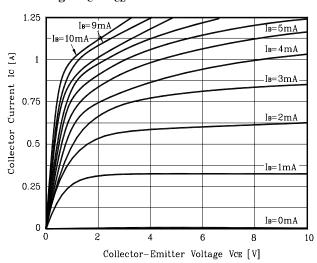
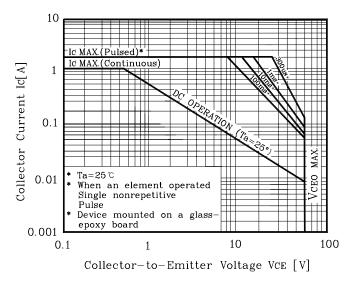
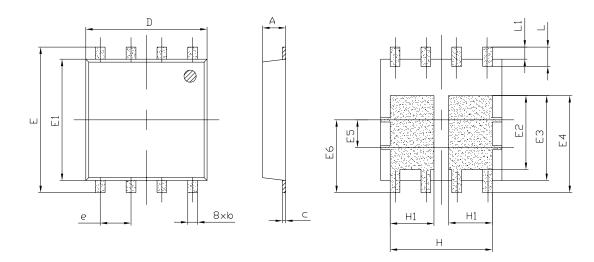


Fig. 10 Safe operating Area



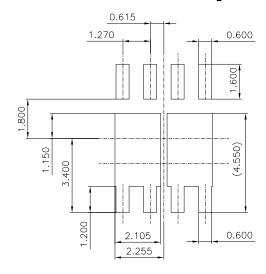
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Outline Dimension



SYMBOL	MILLIMETER(mm)			NOTE
	MINIMUM	NOMINAL	MAXIMUM	11016
Α	0.900	0.950	1.000	
b	0.350	0.400	0.500	
_	0.077	0.127	0.157	
D	4.900	5.000	5.100	
E	5.850	6.000	6.150	
E1	4.900	5.000	5.100	
E2	2.850	3.050	3.250	
E3	3.300	3.500	3.700	
E4	3.800	4.000	4.200	
E5		1.145 TYP		
E6		3.000 TYP		
е		1.270 TYP		
Н	4.210 TYP			
H1		1.805 TYP		
L	0.650	0.800	0.950	
L1	0.350	0.500	0.650	

*Recommend PCB solder land [Unit: mm]



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