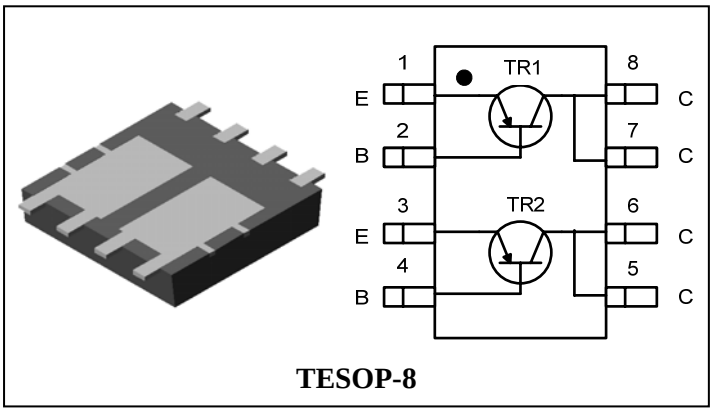
KODENSHI AUK

SUTP052G

Dual PNP Bipolar transistor

Descriptions

- General purpose amplifier
- Recommended for LED Drive Application



TESOP-8

Features

- Thermally Enhanced Power PKG
- Low saturation voltage: $V_{CE(sat)}$=-0.15V Typ.
  @ I_C=-1A, I_B=-50mA
- Large collector current capacity: I_C=-2A
- 2 PNP chips in TESOP-8 Package

Ordering Information

Type NO.	Marking	Package Code
SUTP052G	SUTP052□	TESOP-8

□ : Year & Week Code

Absolute maximum ratings(TR1, TR2)

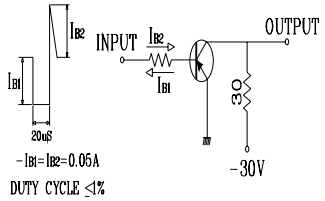
(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-2	A(DC)
	I_{CP}*	-4	A(Pulse)
Collector power dissipation	P_C(Ta=25°C) **	0.75	W/TOTAL
		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 μs

** : Each terminal mounted on a recommended solder land

Electrical Characteristics(TR1, TR2)

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}=-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} [1)]	V_{CE}=-2V, I_C=-0.5A*	120	-	240	
		h_{FE}	V_{CE}=-2V, I_C=-1.5A*	40	-	-	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=-1A, I_B=-0.05A*	-	-	-0.35	V
Base-emitter saturation voltage		$V_{BE(sat)}$	I_C=-1A, I_B=-0.05A*	-	-	-1.2	V
Transition frequency		f_T	V_{CE}=-2V, I_C=-0.05A	-	215	-	MHz
Collector output capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	24	-	pF
Switching Time	Turn-on Time	t_{on}		-	100	-	nS
	Storage Time	t_{stg}		-	300	-	
	Fall Time	t_f		-	50	-	

Note 1) hFE Rank : 120~240 only

*: Pulse test : t_P≤300μs, Duty cycle≤2%

Electrical Characteristic Curves(TR1, TR2)

Fig. 1 P_C - T_a

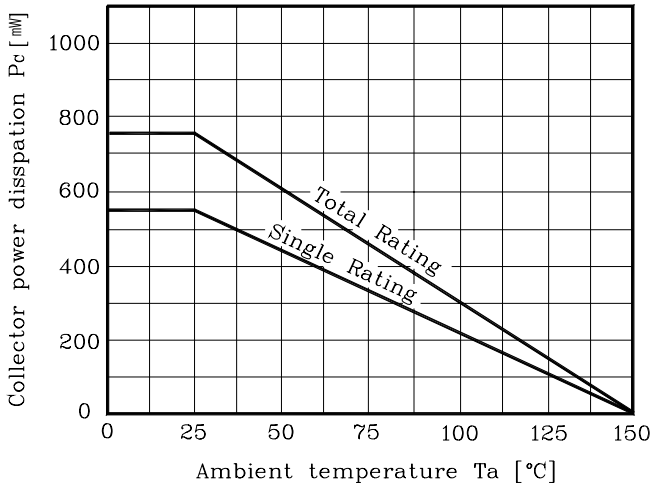


Fig. 2 I_C - V_{BE}

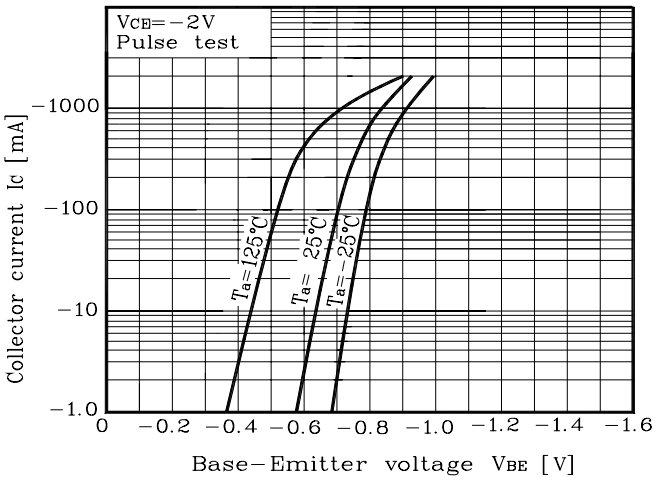


Fig. 3 I_C - V_{CE}

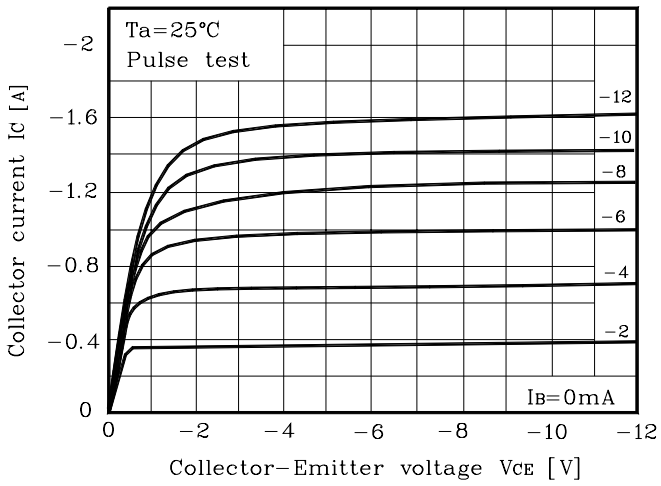


Fig. 4 h_{FE} - I_C

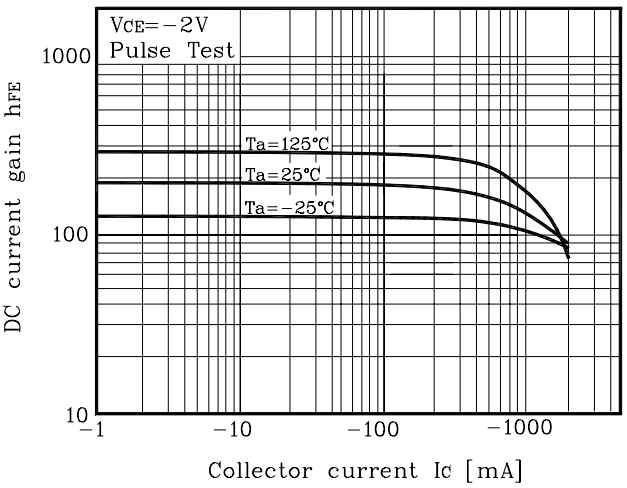


Fig. 5 $V_{CE(sat)}$ - I_C

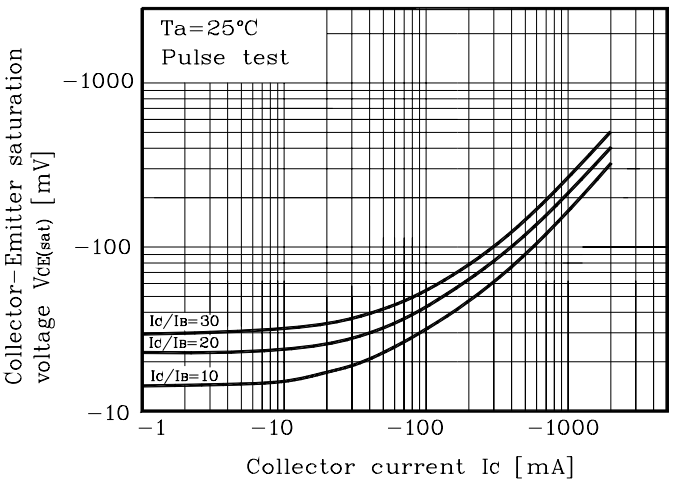
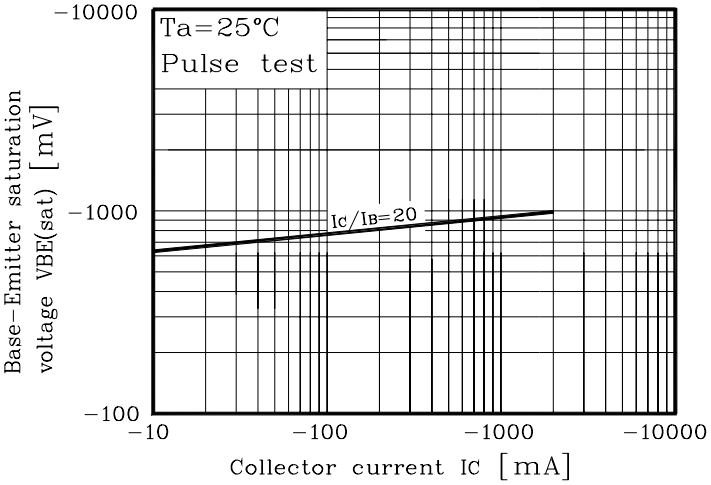


Fig. 6 $V_{BE(sat)}$ - I_C



Electrical Characteristic Curves(TR1, TR2)

Fig. 7 C_{Ob} - V_{CB}

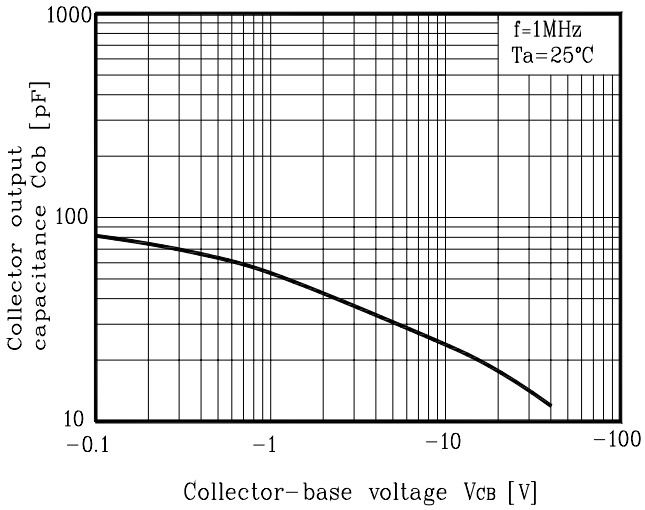
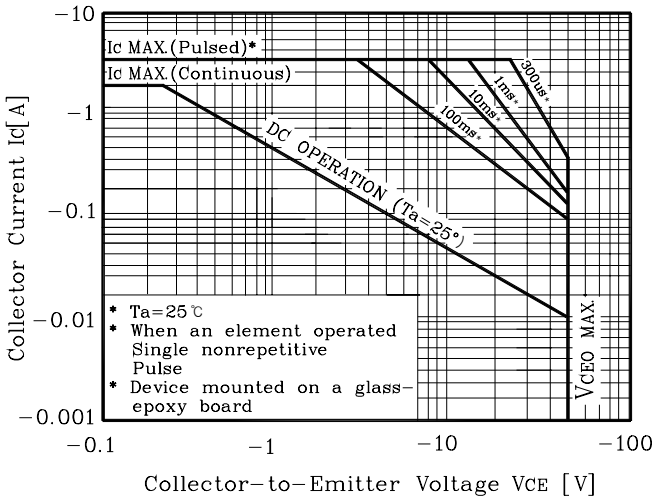
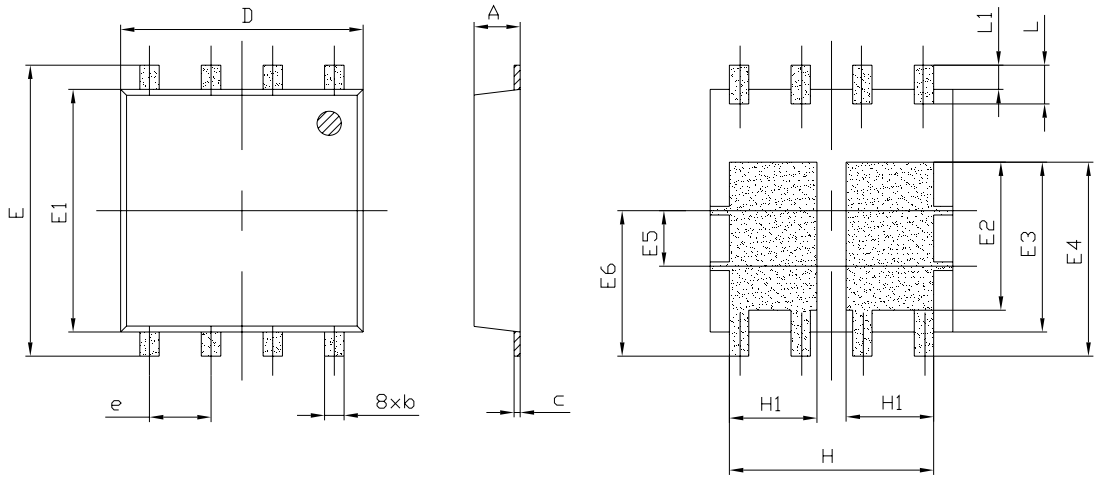


Fig. 8 Safe Operating Area

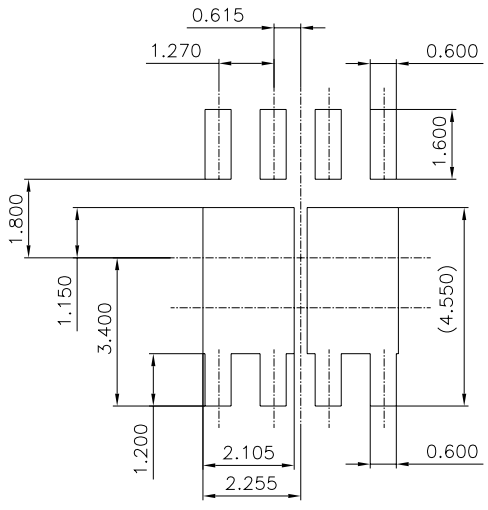


Outline Dimension



SYMBOL	MILLIMETER(mm)			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.900	0.950	1.000	
b	0.350	0.400	0.500	
c	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			
e	1.270 TYP			
H	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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