Silicon PNP Power Transistors 2SA1096 2SA1096A

DESCRIPTION

·With TO-126 package

·Complement to type 2SC2497/2SC2497A

APPLICATIONS

·For low-frequency power amplification

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

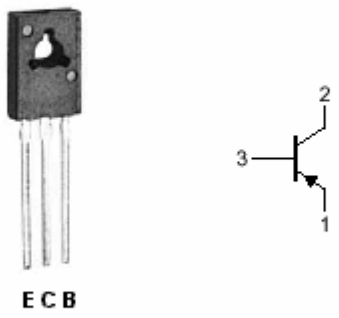

Fig.1 simplified outline (TO-126) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage		Open emitter	-70	V
V_{CEO}	Collector- emitter voltage	2SA1096	Open base	-50	V
		2SA1096A		-60	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-2	A
I_{CM}	Collector current-peak			-3	A
P_D	Total power dissipation		T_C=25□	1.2*1	W
				5*2	
T_j	Junction temperature			150	□
T_{stg}	Storage temperature			-55□+150	□

Note) *1: Without heat sink

*2: With a 100 × 100 × 2 mm A1 heat sink

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	2SA1096	I_C=-2mA ; I_B=0	-50			V
		2SA1096A		-60			
$V_{(BR)CBO}$	Collector-base breakdown voltage		I_C=-1mA ;I_E=0	-70			V
V_{CEsat}	Collector-emitter saturation voltage		I_C=-1.5A ;I_B=-0.15A			-1.0	V
V_{BEsat}	Base-emitter saturation voltage		I_C=-1.5A ;I_B=-0.15A			-1.5	V
I_{CEO}	Collector cut-off current		V_{CE}=-10V; I_B=0			-1	μA
I_{CBO}	Collector cut-off current		V_{CB}=-20V; I_E=0			-100	μA
I_{EBO}	Emitter cut-off current		V_{EB}=-5V; I_C=0			-10	μA
h_{FE}	DC current gain		I_C=-1A ; V_{CE}=-5V	80		220	
C_{OB}	Output capacitance		I_E=0 ; V_{CB}=-20V,f=1MHz		55		pF
f_T	Transition frequency		I_E=-0.5A ; V_{CB}=-5V,f=200MHz		150		MHz

◆ **h_{FE} Classifications**

Q	R
80-160	120-220

PACKAGE OUTLINE

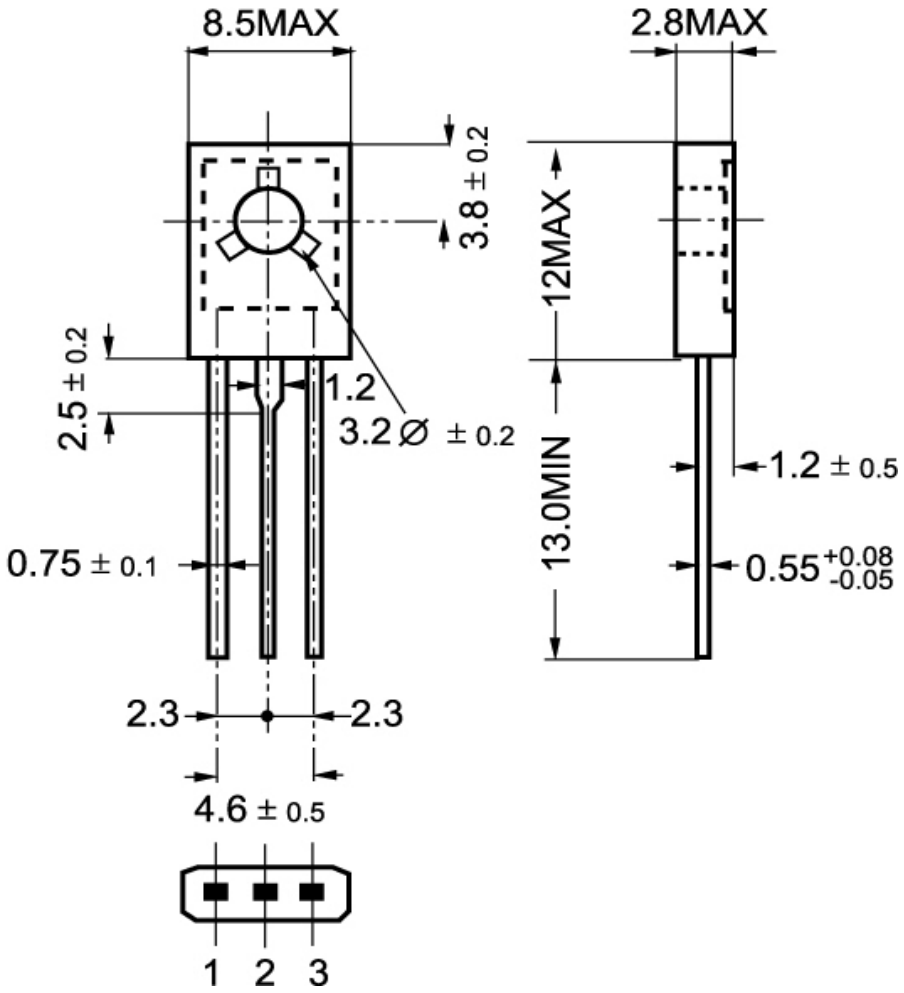

Fig.2 Outline dimensions

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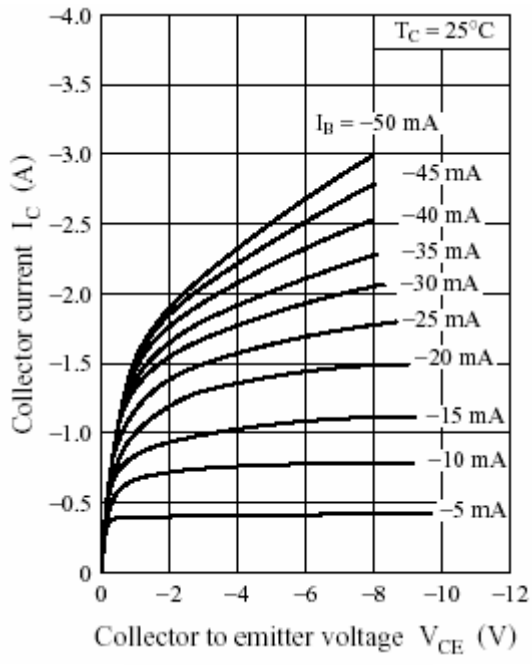

Fig.3 Static Characteristic

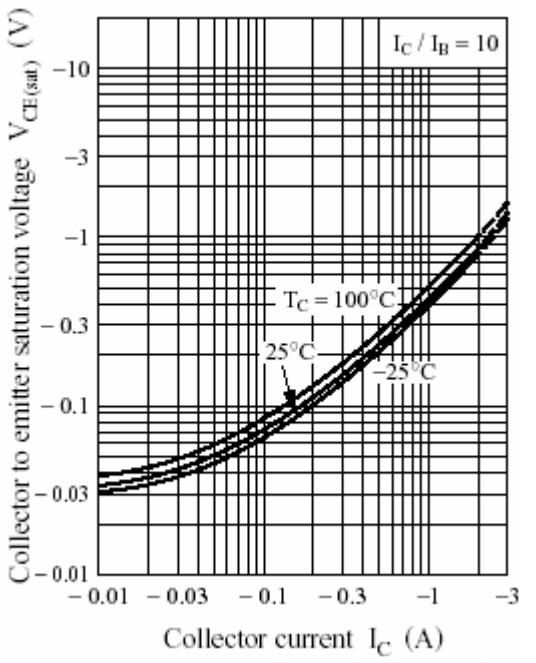

Fig.4 Collector-Emitter Saturation Voltage

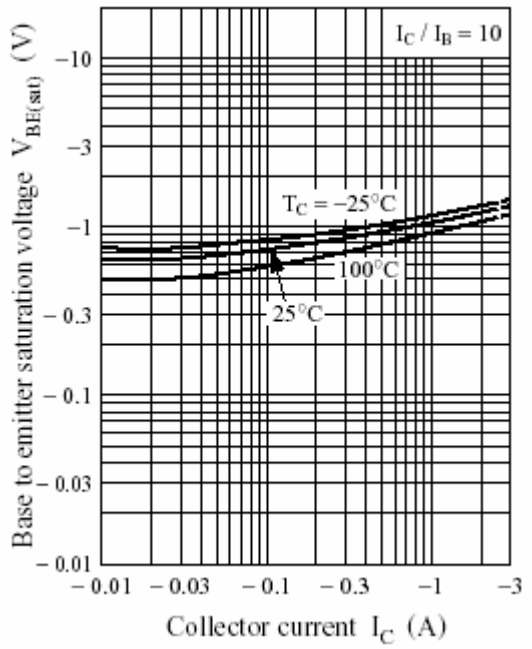

Fig.5 Base-Emitter Saturation Voltage

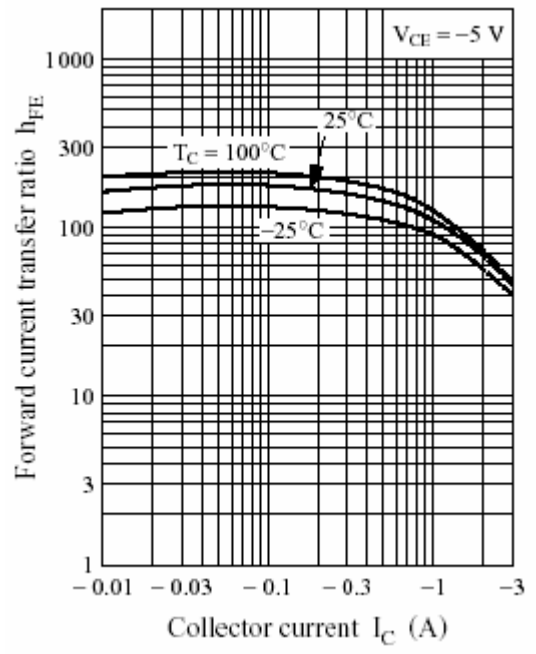

Fig.6 DC current Gain

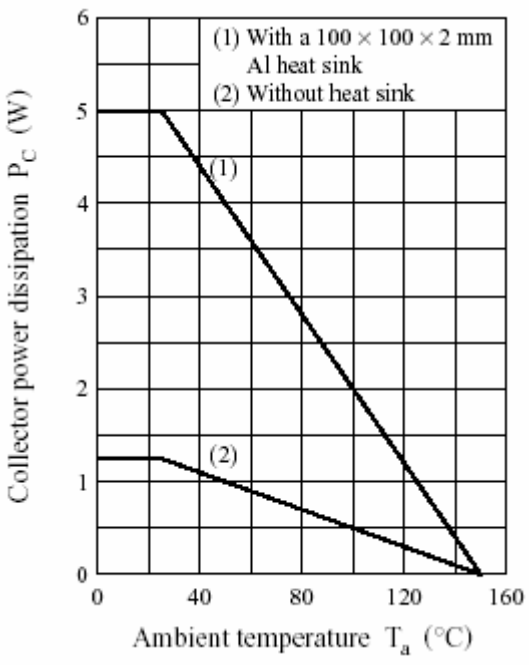

Fig.7 Power Derating

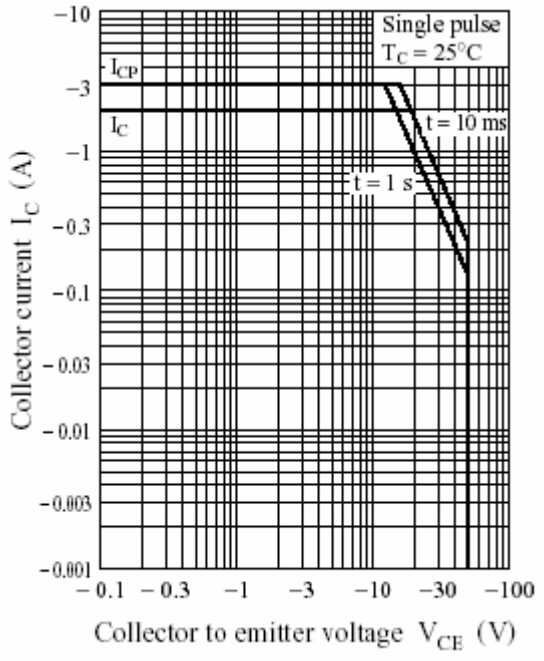

Fig.8 Safe Operating Area