

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	2SA2151A / 2SC6011A
▶ Overseas	Part Number	2SA2151A / 2SC6011A
▶ Equivalent	Part Number	2SA2151A / 2SC6011A

EV is the abbreviation of name EVVO

硅-双极型外延平面 NPN-PNP 配对功率放大晶体管

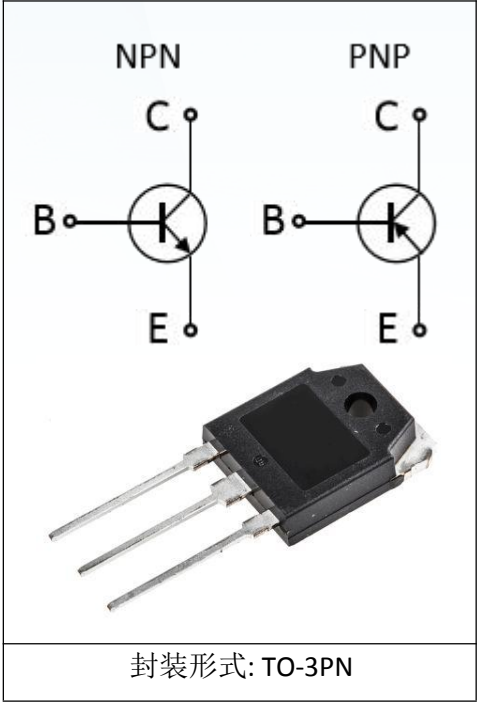
2SA2151A(PNP)
2SC6011A(NPN)

特点与应用：

- 大的输出电流： $I_c=15A$
- 高的击穿电压： $V_{CEO} \geq 230V$
- 宽的工作区域： $3.0A/80V@1\text{ Second}$
- 优的频率特性： $f_T>20MHz$
- 适用于 100W 以上高保真音频放大器末级输出

注意 1：能够持续不断的负荷运行：比如应用于高温、高电压、大电流，并适用于温度的大变化等。

注意 2：在以下的操作环境下功率晶体管的可靠性可能会降低：比如运用在最大的电流和最高的温度和电压等。



绝对最大额定参数值(Tc=25℃):

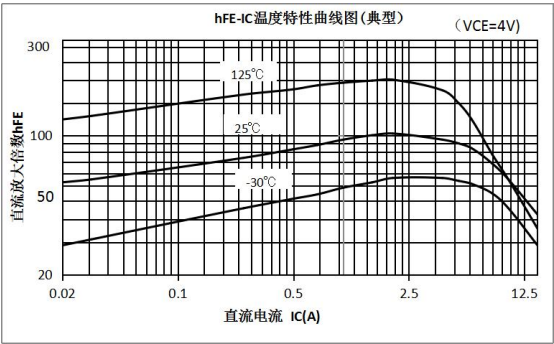
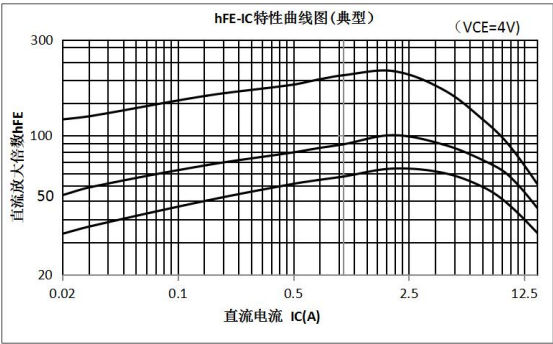
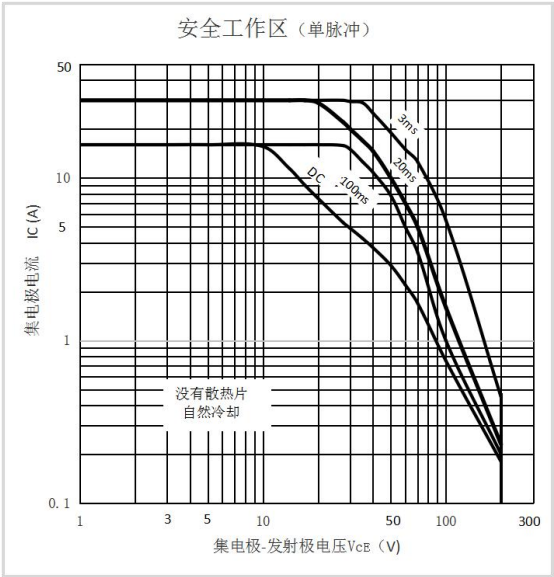
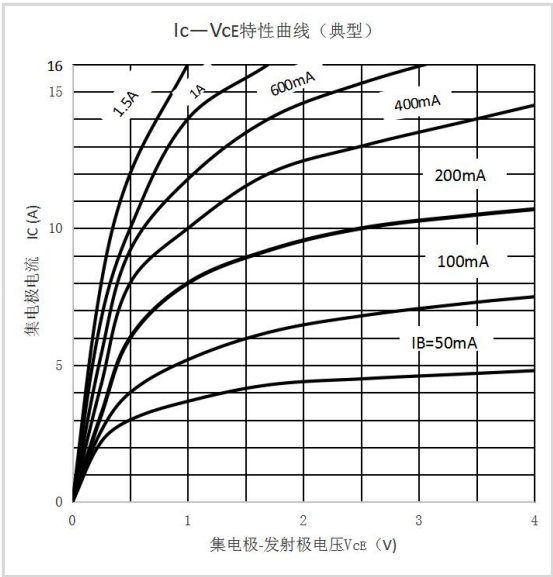
参数名称	符号	额定值	单位
集电极-发射极电压	V_{CBO}	230	V
集电极-基极电压	V_{CEO}	230	V
发射极-基极电压	V_{EBO}	5	V
集电极电流	I_c	15	A
基极电流	I_B	4	A
集电极功率损耗(Tc=25℃)	P_c	160	W
接点温度	T_j	150	℃
存储温度范围	T_{STG}	-55~150	℃

电参数 (Tc=25℃):

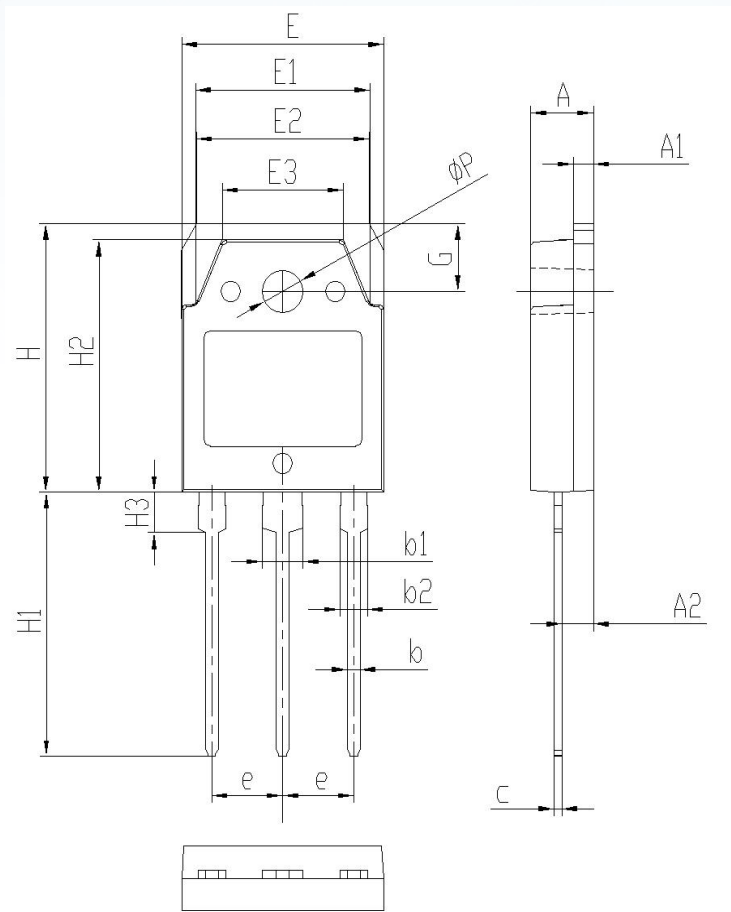
参数名称	参数	测试条件	最小值	典型值	最大值	单位
集电极-基极击穿漏电	ICBO	V _{CB} =230V; I _E =0			10	uA
发射极-基极击穿漏电	IEBO	V _{EB} =5V; I _C =0			10	uA
集电极-发射极击穿电压	V _{(BR)CEO}	I _C =50mA, I _B =0	230			V
放大增益	h _{FE(1)}	V _{CE} =5V; I _C =1A	55		160	
	h _{FE(2)}	V _{CE} =4V; I _C =3A	50			
集电极-发射极饱和电压	V _{CE(sat)}	I _C =5A; I _B =0.5A			0.5	V
基极-发射极电压	V _{BE}	V _{CE} =5V; I _C =7A		1.0	1.5	V
特征频率	f _T	V _{CE} =12V; I _E =0.5A		20		MHz

参数	参数说明	典型值	条件
R _{θJC}	结到管壳温度	0.35	℃/W

典型特征



封装信息：TO-3PN 封装



Symbol	单位 mm		
	Min	Nom	Max
A	4.60	4.80	5.00
A1	1.3	1.5	1.7
A2	2.20	2.40	2.60
b	0.80	1.0	1.20
b1	2.90	3.10	3.30
b2	1.80	2.00	2.20
c	0.50	0.60	0.70
e	5.25	5.45	5.65
E	15.2	15.6	16.0
E1	13.2	13.4	13.6
E2	15.1	15.3	16.5
E3	9.1	9.3	9.5
H	19.8	20.0	20.2
H1	19.0	19.5	20.0
H2	18.3	18.5	18.7
H3	2.8	3.0	3.2
G	4.8	5.0	5.2
ϕP	3.00	3.20	3.40

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