



SY semiconductors

Shenzhen SY Semiconductors Co., LTD.

EB13003BD

● 特点

耐压高 开关速度快

安全工作区宽 符合 RoHS 规范

● 应用

节能灯、电子镇流器

电子变压器、开关电源

FEATURES

▲ HIGH VOLTAGE CAPABILITY ▲ HIGH SPEED SWITCHING

▲ WIDE SOA ▲ RoHS COMPL

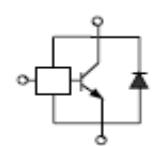
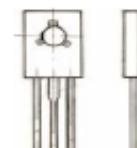
APPLICATION

▲ FLUORESCENT LAMP ▲ ELECTRONIC TRANSFORMER

▲ ELECTRONIC TRANSFORMER ▲ SWICH MODE POWER SUPPLY

● 最大额定值 Absolute Maximum Ratings (Tc=25°C)

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
集电极-基极电压 Collector-Base Voltage	V _{CBO}	700	
集电极-发射极电压 Collector-Emitter Voltage	V _{CEO}	400	V
发射极-基极电压 Emitter-Base Voltage	V _{EBO}	9	V
集电极电流 Collector Current	I _C	2.0	A
集电极耗散功率 Total Power Dissipation @TC=25°C	P _{DTOT}	40	W
最高工作温度 Junction Temperature	T _J	150	°C
贮存温度 Storage Temperature	T _{STG}	-65-150	°C



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● 电特性 Electronic Characteristics (Tc=25°C)

参数名称 CHARACTERISTICS	符号 SYMBOL	测试条件 TEST CONDITION	最小值 MIN	最大值 MAX	单位 UNIT
集电极-基极截至电流 Collector-Base Cutoff Current	I _{CBO}	V _{CB} =700V I _E =0		100	μA
集电极-发射极截至电流 Collector-Emitter Cutoff Current	I _{CEO}	V _{CE} =400V I _B =0		100	uA
发射极-基极截至电流 Emitter- Base Cutoff Current	I _{EBO}	V _{EB} =9V, I _C =0		100	uA
集电极-基极打压 Collector- Base Voltage	BV _{CBO}	I _C =1mA, I _B =0	700		V
集电极-发射极电压 Collector-Emitter Voltage	BV _{CEO}	I _C =10mA, I _E =0	400		V
发射极-基极电压 Emitter-Base Voltage.	BV _{EBO}	I _C =1mA, I _C =0	9		V
集电极-发射极饱和电压 Collector-Emitter Saturation Voltage	V _{CESAT}	I _C =1.0A I _B =0.25A		0.5	V
		I _C =1.5A I _B =0.5A		0.6	V
基极-发射极饱和电压 Base-Emitter Saturation Voltage	V _{BESAT}	I _C =0.5A I _B =0.1A		1.2	V
电流放大倍数 DC Current Gain	HFE	I _C =0.5A V _{CE} =5V	10	40	
		I _C =1mA V _{CE} =5V	7		
贮存时间 Storage Time	T _S	I _C =0.25A (UI9600)	2	4	us



● 放大倍数和 Ts 分档 CLASSIFICATION OF HFE AND TS

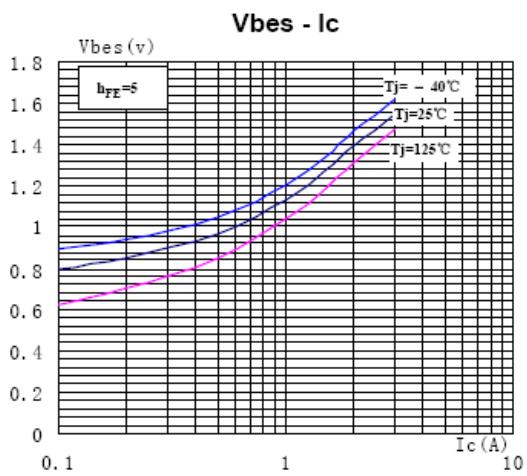
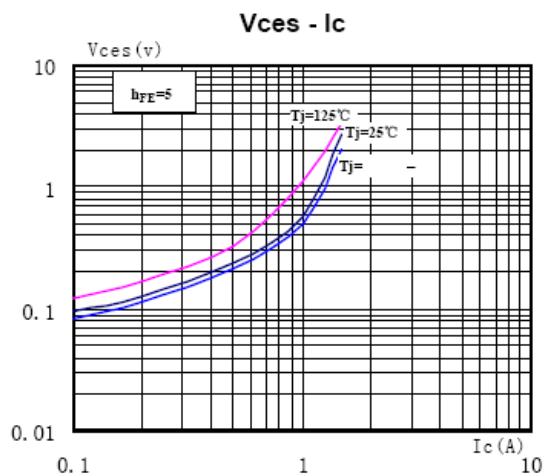
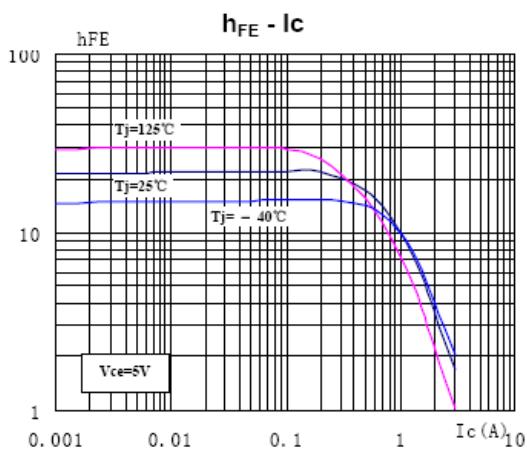
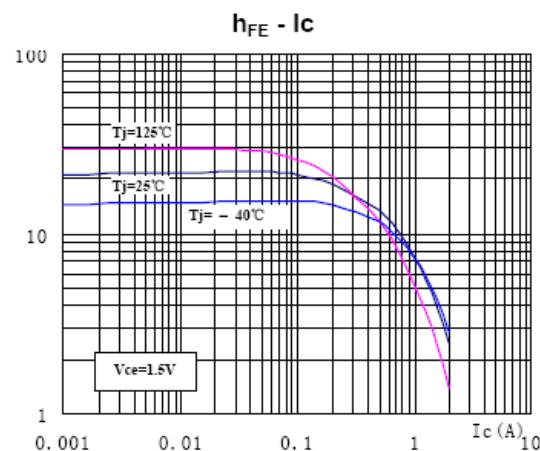
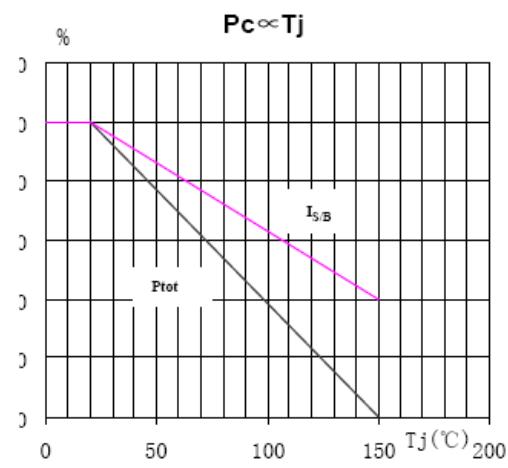
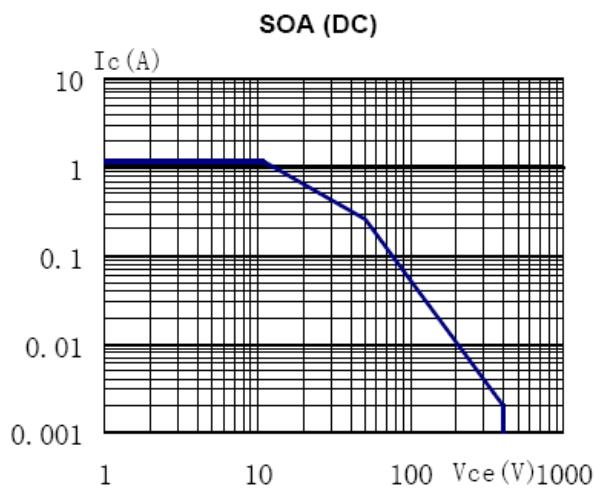
HFE	10-15	15-20	20-25	25-30
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TS	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0
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● The name and content of poisonous and harmful material in products

部件名称 Part's Name 含量要求 CONTENT	有毒有害物质或元素 hazardous substance					
	铅 Pb	汞 Hg	镉 Cd	铬 Cr(VI)	多溴联苯 PBB	多溴二苯醚 PBDE
	≤0.1%	≤0.1%	≤0.01%	≤0.1%	≤0.1%	≤0.1%
引线 Lead Frame	○	○	○	○	○	○
塑封树脂 Moding Compound	○	○	○	○	○	○
芯片 Chip	○	○	○	○	○	○
焊线 Wire Bonding	○	○	○	○	○	○
焊料 Solder	×	○	○	○	○	○
说明 Note	○: 表示该元素的含量在 SJ/T11363-2006 标准的限量要求一下。 ○: means the hazardous material is under the criterion of SJ/T11363-2006. ×: 表示该元素的焊料超出 SJ/T11363-2006 标准的限量要求。 ×: means the hazardous material exceeds the criterion of SJ/T11363-2006. 目前产品的焊料中含有铅成分，但属于欧盟 RoHS 指令豁免范围。 The plumbum element of solder exist in products presently, but within the allowed range of Eurogroup's ROHS.					

●特性曲线 TYPICAL CHARACTERISTICS



● 机械尺寸 MECHANICAL DIMENSIONS

TO-126 MECHANICAL DATA

SYMBOL	Min	Nom	Max	SYMBOL	Min	Nom	Max
A	2.3		2.8	L	14.7		16.5
B	1.2	1.34	1.42	L1	2.0		2.60
B1	0.66		1.0	P	0.9		1.2
b	0.65		0.88	F	3.0		3.3
c	0.45		0.60	Q	3.6		4.4
D	10.5		11.2	Q1	0.9		1.5
E	7.2		7.8	e		2.29	

