

STBV45D

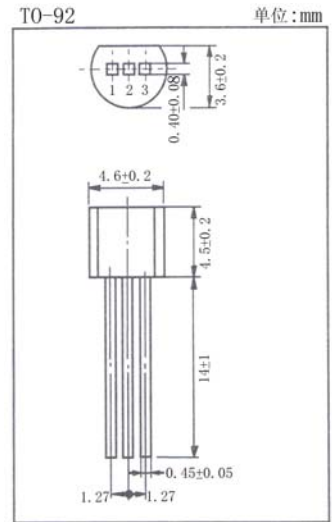
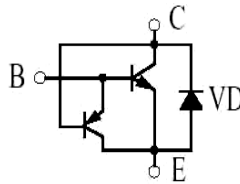
硅 NPN 半导体三极管/SILICON NPN TRANSISTOR

用途：主要用于节能灯、日光灯电子镇流器及其它开关、振荡电路。/Purpose: High frequency electronic lighting ballast applications, converters, inverters, switching regulators, etc.

特点：高压性能好，低动态参数变化，开关速度快。/Features: High voltage capability, low spread of dynamic parameters, very high switching speed.

极限参数/Absolute maximum ratings(Ta=25°C)

参数符号 Symbol	数值 Rating	单位 Unit
V _{CES}	700	V
V _{CEO}	400	V
V _{EBO}	9.0	V
I _C	0.75	A
I _{CM}	1.5	A
I _B	0.4	A
I _{BM}	0.75	A
P _C	0.95	W
T _j	150	°C
T _{stg}	-55~150	°C



引脚：1. E 2. C 3. B

电性能参数/Electrical characteristics(Ta=25°C)

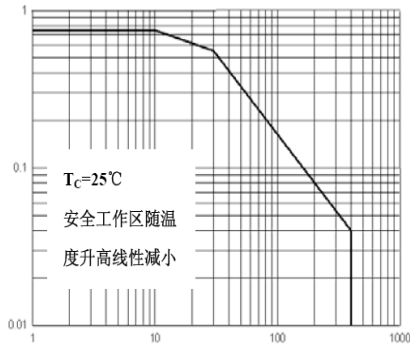
参数符号 Symbol	测试条件 Test condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
V _{CES}	I _C =1mA	V _{BE} =0	700			V
V _{CEO}	I _C =10mA	I _B =0	400			V
V _{EBO}	I _E =1mA	I _C =0	9			V
I _{CEV}	V _{CE} =700V	V _{BE} =-1.5V			0.1	mA
I _{CEO}	V _{CE} =400V	I _B =0			0.1	mA
I _{EBO}	V _{EB} =9.0V	I _C =0			0.1	mA
*h _{FE(1)}	V _{CE} =5.0V	I _C =0.2A	10		30	
*h _{FE(2)}	V _{CE} =5.0V	I _C =0.4A	5		20	
*V _{CE(sat)1}	I _C =0.2A	I _B =0.04A		0.2	0.5	V
*V _{CE(sat)2}	I _C =0.3A	I _B =0.075A		0.3	1.0	V
*V _{CE(sat)3}	I _C =0.4A	I _B =0.135A		0.4	1.5	V
*V _{BE(sat)1}	I _C =0.2A	I _B =0.04A			1.0	V
*V _{BE(sat)2}	I _C =0.3A	I _B =0.075A			1.2	V
t _f	V _{CE} =5V I _C =100mA				0.6	μS
t _s	(UI9600)				4.0	μS
f _T	V _{CE} =10V I _C =50mA f=1MHz		5			MHz

*脉冲测试：脉冲周期=300 μS，占空比=1.5%。

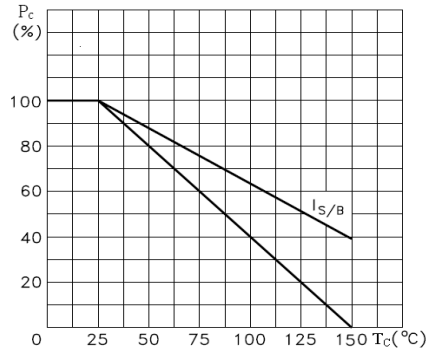
*pulse: pulse duration=300 μS, duty cycle=1.5%.

STBV45D

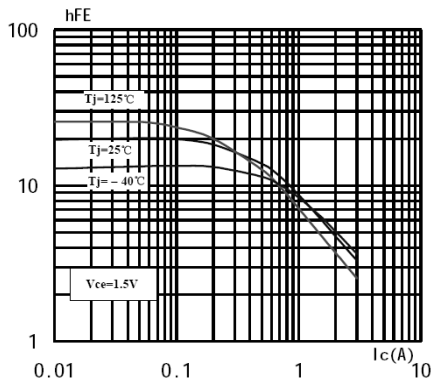
SOA (DC)



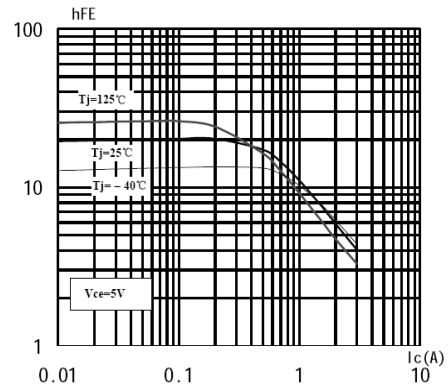
P_c-T_c



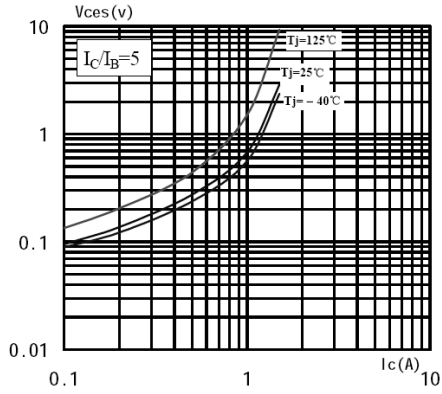
$h_{FE}-I_c$



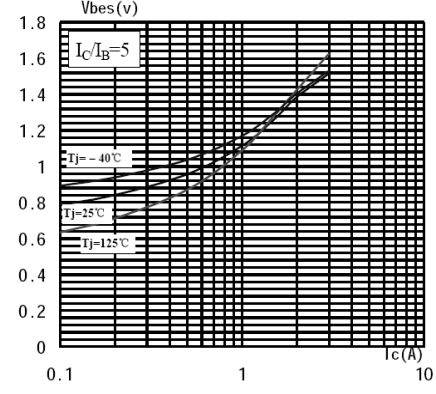
$h_{FE}-I_c$



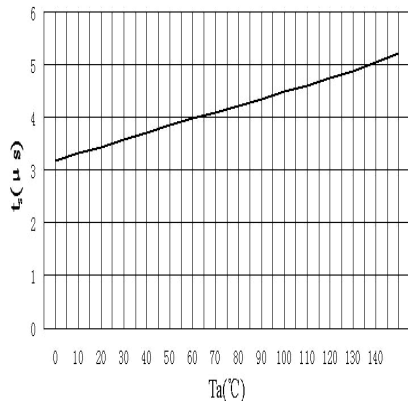
$V_{ces}-I_c$



$V_{bes}-I_c$



t_s-T_a



$h_{FE}-T_a$

