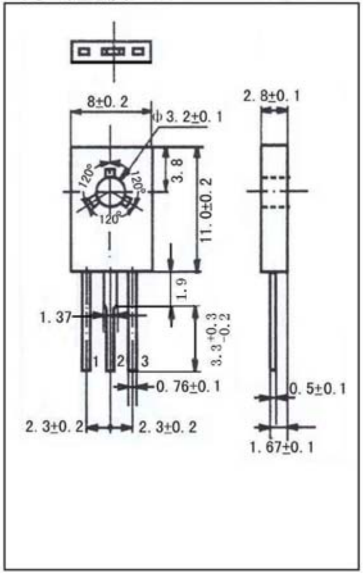
MJE13003L5(3DD13003L5) 硅NPN半导体三极管/SILICON NPN TRANSISTOR

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.

TO-126反短脚 单位：mm



引脚：1.B 2.C 3.E

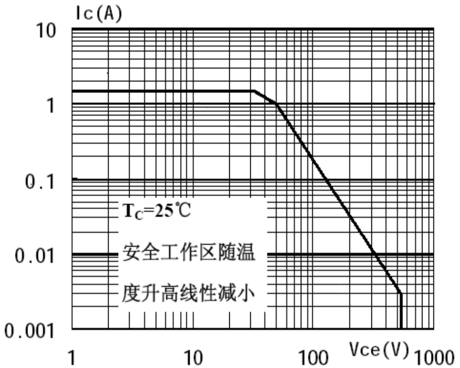
极限参数/Absolute maximum ratings(Ta=25℃)

参数符号 Symbol	数值 Rating	单位 Unit
V_{CBO}	900	V
V_{CEO}	530	V
V_{EBO}	9.0	V
I_C	1.5	A
I_{CP}	3.0	A
P_C(Ta=25℃)	1.25	W
P_C(Tc=25℃)	50	W
T_j	150	℃
T_{stg}	-55～150	℃

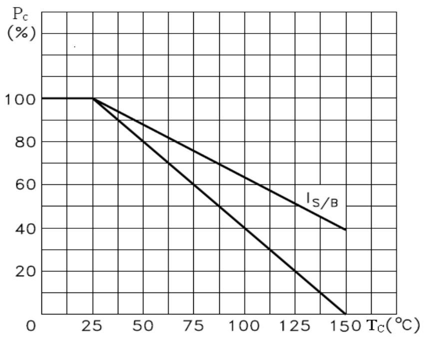
电性能参数/Electrical characteristics(Ta=25℃)

参数符号 Symbol	测试条件 Test condition		数值 Rating 最小值 Min	典型值 Typ	最大值 Max	单位 Unit
V_{CBO}	I_C=1mA	I_E=0	900			V
V_{CEO}	I_C=10mA	I_B=0	530			V
V_{EBO}	I_E=1mA	I_C=0	9			V
I_{CBO}	V_{CB}=900V	I_E=0			0.1	mA
I_{CEO}	V_{CE}=530V	I_B=0			0.1	mA
I_{EBO}	V_{EB}=9.0V	I_C=0			0.1	mA
$h_{FE(1)}$	V_{CE}=10V	I_C=0.4A	10		40	
$h_{FE(2)}$	V_{CE}=10V	I_C=1.0mA	15			
$h_{FE(3)}$	V_{CE}=10V	I_C=1.0A	6		40	
$V_{CE(sat)(1)}$	I_C=0.5A	I_B=0.1A			0.8	V
$V_{CE(sat)(2)}$	I_C=1.5A	I_B=0.5A			2.5	V
$V_{BE(sat)}$	I_C=0.5A	I_B=0.1A			1.2	V
f_T	V_{CE}=10V I_C=0.1A	f=1.0MHz	5.0			MHz
t_f	V_{CE}=5V I_C=0.25A (UI9600)				1.2	μs
t_S			2.0		6.0	μs

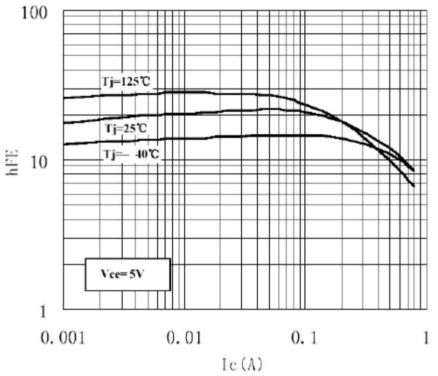
SOA(DC)



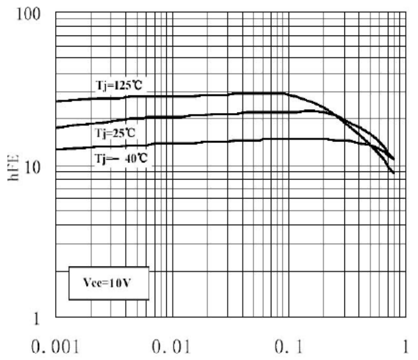
P$_C$-T$_C$



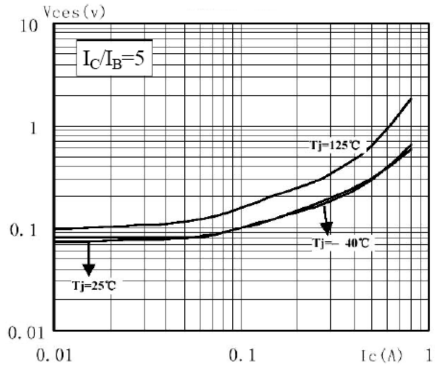
0h$_{FE}$-Ic



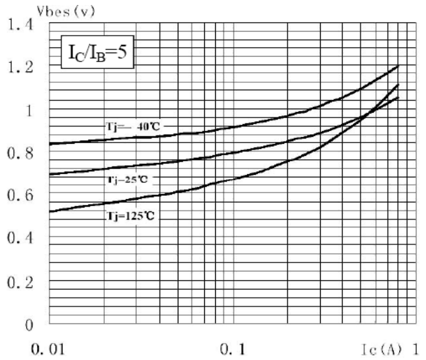
h$_{FE}$-Ic



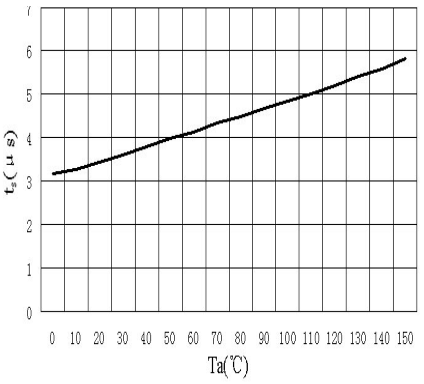
Vces-I$_C$



Vbes-I$_C$



t$_S$-Ta



h$_{FE}$-Ta