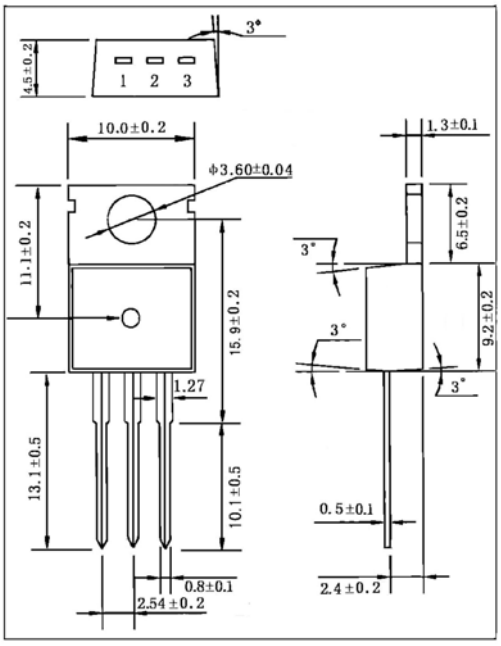
MJE13003M7(3DD13003M7)　　硅NPN半导体三极管/SILICON NPN TRANSISTOR

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-220　　单位：mm



引脚：1 B　2 C　3 E

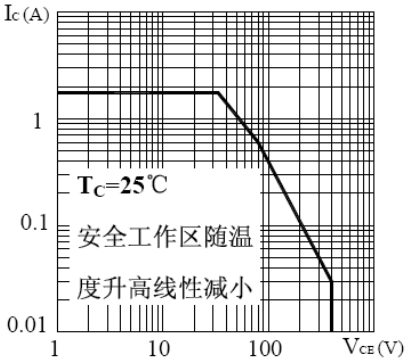
极限参数/Absolute maximum ratings(Ta=25℃)

参数符号 Symbol	数值 Rating	单位 Unit
V_{CBO}	700	V
V_{CEO}	400	V
V_{EBO}	9.0	V
I_C	1.8	A
P_C(Ta=25℃)	2.0	W
P_C(Tc=25℃)	50	W
T_j	150	℃
T_{stg}	-55～150	℃

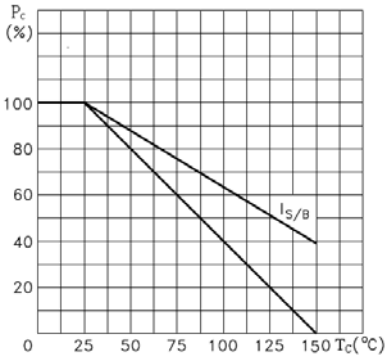
电性能参数/Electrical characteristics(Ta=25℃)

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	700			V
V_{CEO}	I_C=10mA		I_B=0	400			V
V_{EBO}	I_E=1mA		I_C=0	9.0			V
I_{CBO}	V_{CB}=700V		I_E=0			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}	V_{CE}=5.0V		I_C=0.5A	10		40	
$V_{CE(sat)}$	I_C=1.0A		I_B=0.25A			0.8	V
$V_{BE(sat)}$	I_C=1.0A		I_B=0.5A			1.2	V
f_T	V_{CE}=10V	I_C=0.1A	f=1.0MHz	5.0			MHz
t_f	V_{CE}=5V (UI9600)		I_C=0.25A			0.8	μs
t_s						4.0	μs

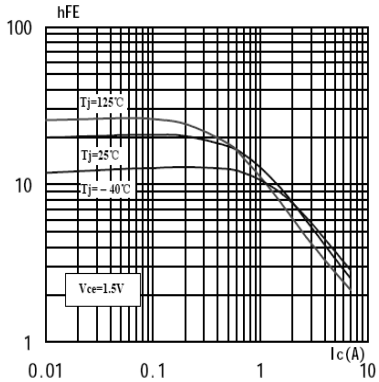
SOA(DC)



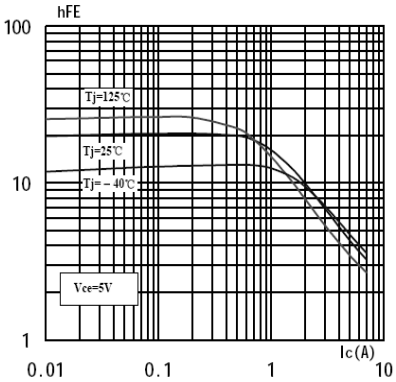
P_C-T_C



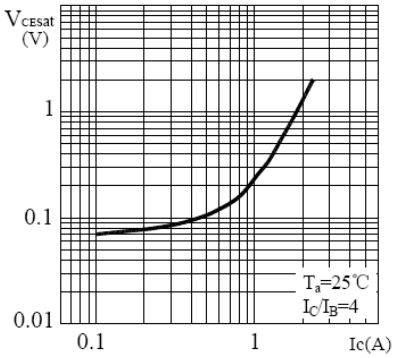
h_{FE}-Ic



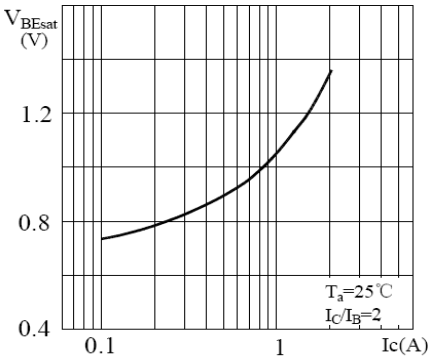
h_{FE}-Ic



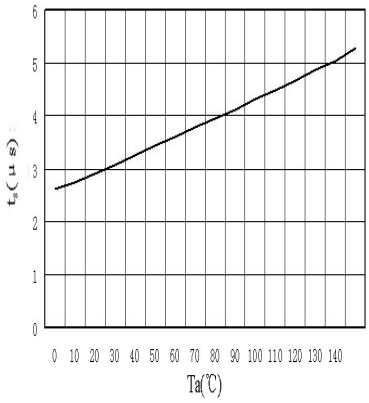
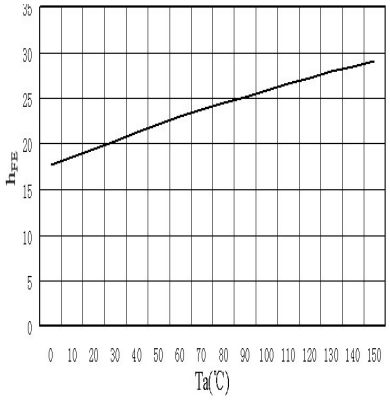
Vces-I_C



Vbes-I_C



t_S-Ta



h_{FE}-Ta