

MJE13003DG5 (3DD13003DG5)

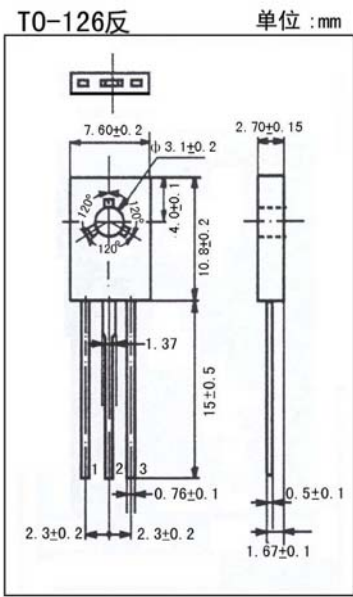
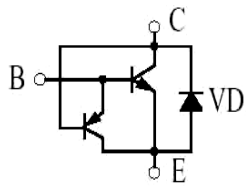
硅 NPN 半导体三极管/SILICON NPN TRANSISTOR

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.

极限参数/Absolute maximum ratings(Ta=25℃)

参数符号 Symbol	数值 Rating	单位 Unit
V_{CB0}	700	V
V_{CE0}	450	V
V_{EB0}	9.0	V
I_C	1.3	A
$P_C(Ta=25^{\circ}C)$	1.25	W
$P_C(Tc=25^{\circ}C)$	30	W
T_j	150	℃
T_{sag}	-55~150	℃

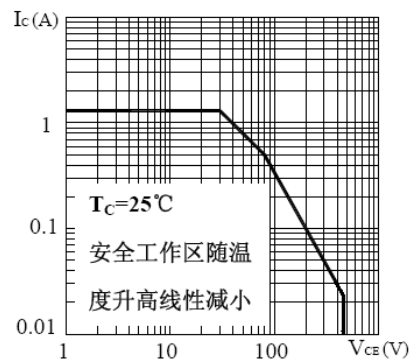


电性能参数/Electrical characteristics(Ta=25℃)

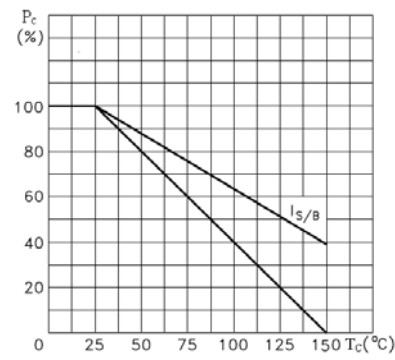
引脚：1. B 2. C 3. E

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_{CB0}	$I_C=1mA$	$I_E=0$	700			V
V_{CE0}	$I_C=10mA$	$I_B=0$	450			V
V_{EB0}	$I_E=1mA$	$I_C=0$	9.0			V
I_{CB0}	$V_{CB}=700V$	$I_E=0$			0.1	mA
I_{CE0}	$V_{CE}=450V$	$I_B=0$			0.1	mA
I_{EB0}	$V_{EB}=9.0V$	$I_C=0$			0.1	mA
$h_{FE(1)}$	$V_{CE}=5V$	$I_C=200mA$	10		40	
$h_{FE(2)}$	$V_{CE}=5V$	$I_C=1mA$	7			
$h_{FE(3)}$	$V_{CE}=5V$	$I_C=1.2A$	5			
$V_{CE(sat)(1)}$	$I_C=500mA$	$I_B=100mA$			0.5	V
$V_{CE(sat)(2)}$	$I_C=1.0A$	$I_B=500mA$			0.6	V
$V_{BE(sat)}$	$I_C=500mA$	$I_B=100mA$			1.2	V
t_f	$V_{CE}=5V$ (UI9600)	$I_C=0.25A$			0.8	μS
t_s					3.5	μS
f_T	$V_{CE}=10V$	$I_C=0.1A$	$f=1MHz$	5		MHz

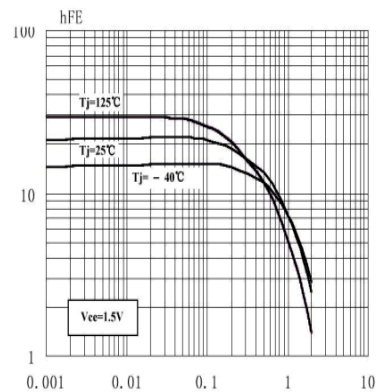
SOA (DC)



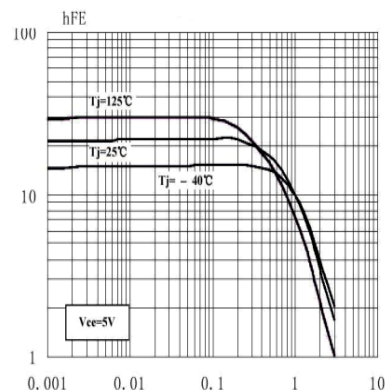
P_c-T_c



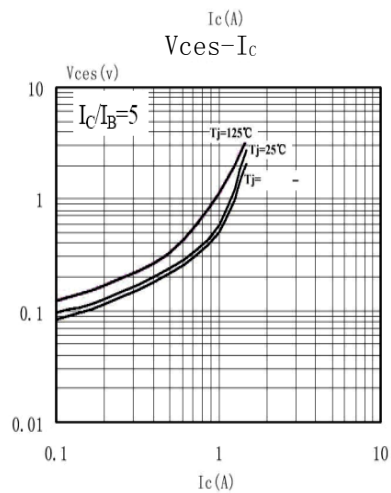
$h_{FE}-I_c$



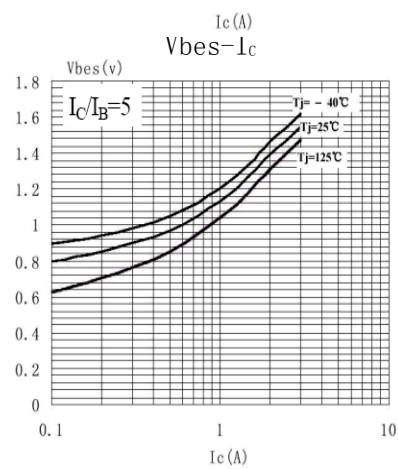
$h_{FE}-I_c$



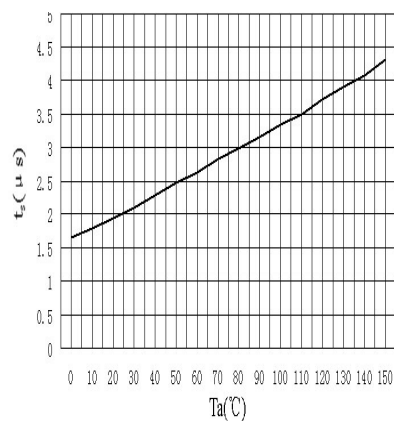
$V_{ces}-I_c$



$V_{bes}-I_c$



t_s-T_a



$h_{FE}-T_a$

