

MJE13003VH5 (3DD13003VH5) 硅 NPN 半导体三极管/SILICON NPN TRANSISTOR

用途：耐压高，开关速度快，安全工作区宽，符合 RoHS 规范。

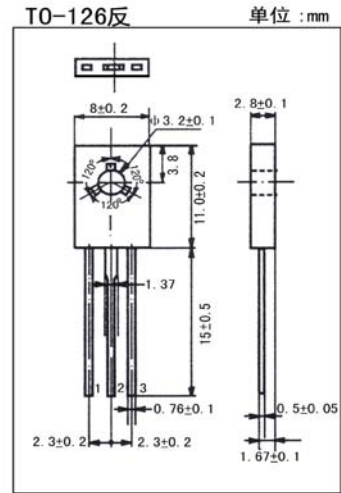
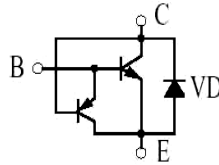
Purpose: High voltage capability, high speed switching, wide soa, RoHS compliant.

特点：适用于 110V 电路、节能灯、电子镇流器。

Features: Suitable for 110V circuit mode, fluorescent lamp, electronic ballast.

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

参数符号 Symbol	数值 Rating	单位 Unit
V_{CB0}	400	V
V_{CE0}	200	V
V_{EB0}	9.0	V
I_C	2.0	A
P_C	1.25	W
$P_C(T_c=25^\circ\text{C})$	20	W
T_j	150	°C
T_{stg}	-55~150	°C



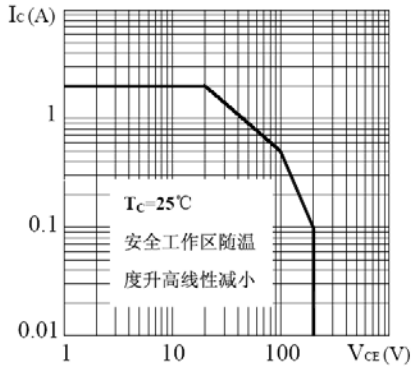
引脚：1. B 2. C 3. E

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

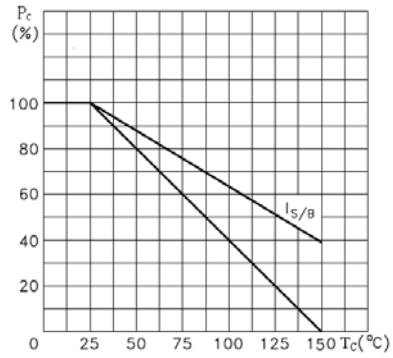
参数符号 Symbol	测试条件 Test Condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
V_{CB0}	$I_C=1\text{mA}$	$I_E=0$	400			V
V_{CE0}	$I_C=10\text{mA}$	$I_B=0$	200			V
V_{EB0}	$I_E=1\text{mA}$	$I_C=0$	9.0			V
I_{CB0}	$V_{CB}=400\text{V}$	$I_E=0$			0.1	mA
I_{CE0}	$V_{CE}=200\text{V}$	$I_B=0$			0.1	mA
I_{EB0}	$V_{EB}=9.0\text{V}$	$I_C=0$			0.1	mA
$h_{FE(1)}$	$V_{CE}=5.0\text{V}$	$I_C=0.2\text{A}$	10		40	
$h_{FE(2)}$	$V_{CE}=5.0\text{V}$	$I_C=0.001\text{A}$	7.0			
$h_{FE(3)}$	$V_{CE}=5.0\text{V}$	$I_C=2.0\text{A}$	5.0			
$V_{Ces(1)}$	$I_C=1.5\text{A}$	$I_B=0.5\text{A}$			1.0	V
$V_{Cesat(2)}$	$I_C=0.5\text{A}$	$I_B=0.1\text{A}$			0.5	V
$V_{BE(sat)}$	$I_C=1.5\text{A}$	$I_B=0.5\text{A}$			1.5	V
t_s	$V_{CE}=5\text{V}$ $I_C=0.25\text{A}$ (UI9600)		1.5		3.5	μs
t_f					0.6	μs
f_T	$V_{CE}=10\text{V}$ $I_C=0.2\text{A}$ $f=1\text{MHz}$		4			MHz

MJE13003VH5 (3DD13003VH5)

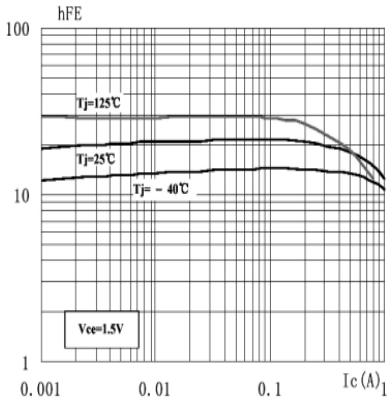
SOA (DC)



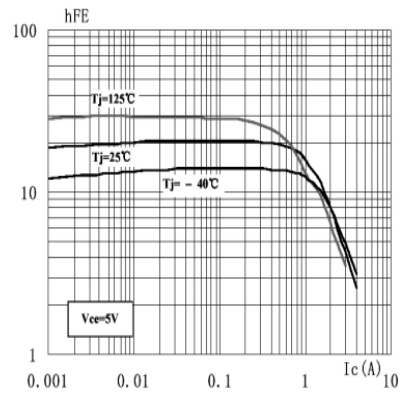
$P_c - T_c$



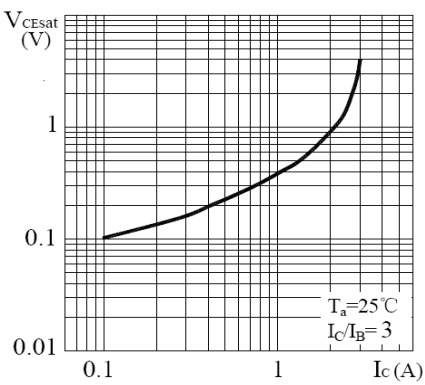
$h_{FE} - I_c$



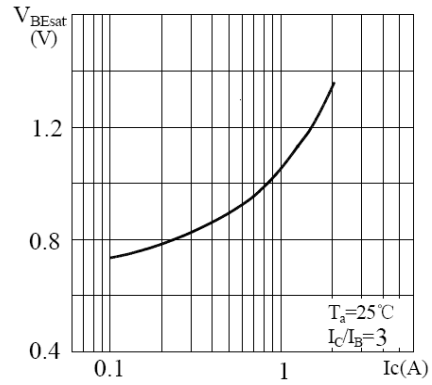
$h_{FE} - I_c$



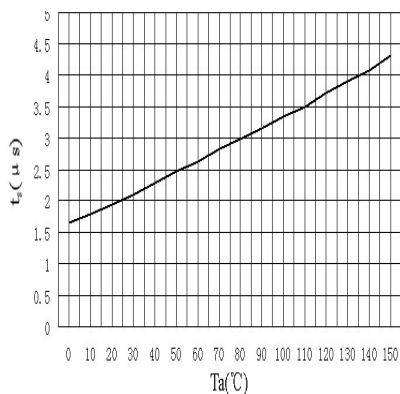
$V_{ces} - I_c$



$V_{bes} - I_c$



$t_s - T_a$



$h_{FE} - T_a$

