

# MJE13003VH1 (3DD13003VH1) 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。

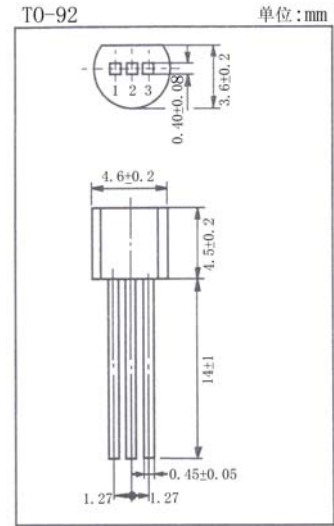
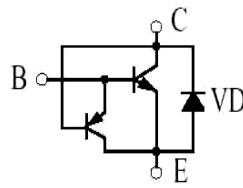
Purpose: High voltage capability, high speed switching, wide soa, RoHS compliant.

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 <sub>CB0</sub>	400	V
V <sub>CE0</sub>	200	V
V <sub>EB0</sub>	9.0	V
I <sub>C</sub>	2.0	A
P <sub>C</sub>	1.0	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-55~150	°C



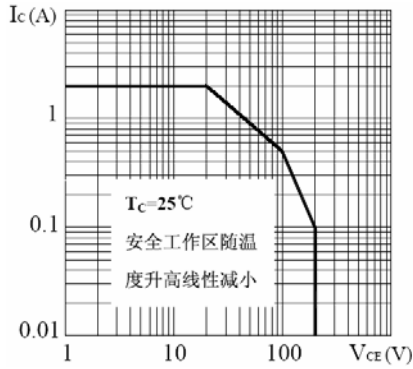
引脚: 1. E 2. C 3. B

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

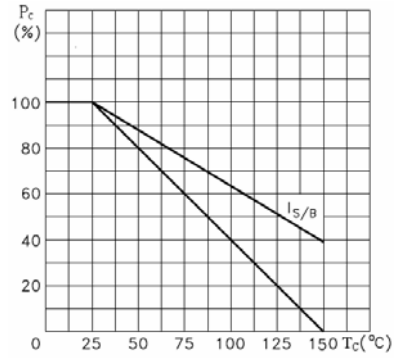
参数符号 Symbol	测试条件 Test Condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
V <sub>CB0</sub>	I <sub>C</sub> =1mA	I <sub>E</sub> =0	400			V
V <sub>CE0</sub>	I <sub>C</sub> =10mA	I <sub>B</sub> =0	200			V
V <sub>EB0</sub>	I <sub>E</sub> =1mA	I <sub>C</sub> =0	9.0			V
I <sub>CB0</sub>	V <sub>CB</sub> =400V	I <sub>E</sub> =0			0.1	mA
I <sub>CE0</sub>	V <sub>CE</sub> =200V	I <sub>B</sub> =0			0.1	mA
I <sub>EB0</sub>	V <sub>EB</sub> =9.0V	I <sub>C</sub> =0			0.1	mA
h <sub>FE(1)</sub>	V <sub>CE</sub> =5.0V	I <sub>C</sub> =0.2A	10		40	
h <sub>FE(2)</sub>	V <sub>CE</sub> =5.0V	I <sub>C</sub> =0.001A	7.0			
h <sub>FE(3)</sub>	V <sub>CE</sub> =5.0V	I <sub>C</sub> =2.0A	5.0			
V <sub>CE(sat) (1)</sub>	I <sub>C</sub> =1.5A	I <sub>B</sub> =0.5A			1.0	V
V <sub>CE(sat) (2)</sub>	I <sub>C</sub> =0.5A	I <sub>B</sub> =0.1A			0.5	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =1.5A	I <sub>B</sub> =0.5A			1.5	V
t <sub>s</sub>	V <sub>CE</sub> =5V (UI9600)	I <sub>C</sub> =0.25A	1.5		3.5	μs
t <sub>f</sub>					0.6	μs
f <sub>T</sub>	V <sub>CE</sub> =10V	I <sub>C</sub> =0.2A	f=1MHz	4		MHz

# MJE13003VH1 (3DD13003VH1)

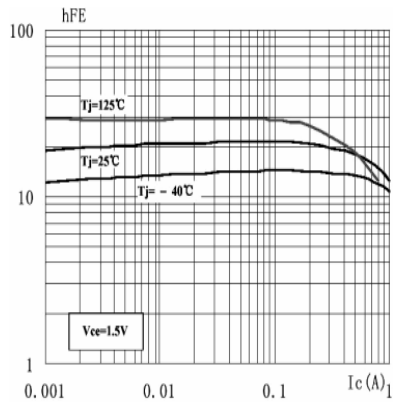
SOA (DC)



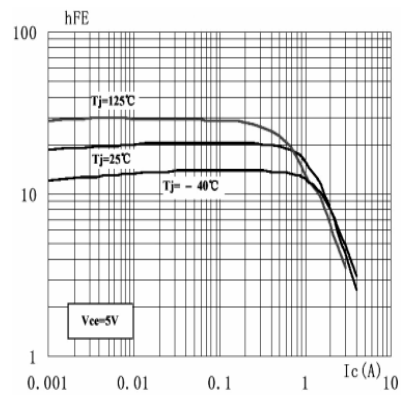
$P_c - T_c$



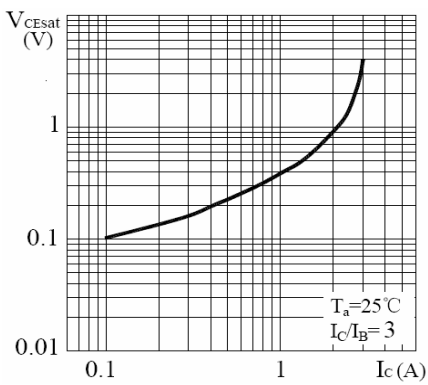
$h_{FE} - I_c$



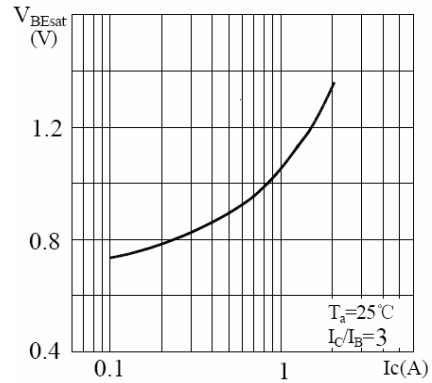
$h_{FE} - I_c$



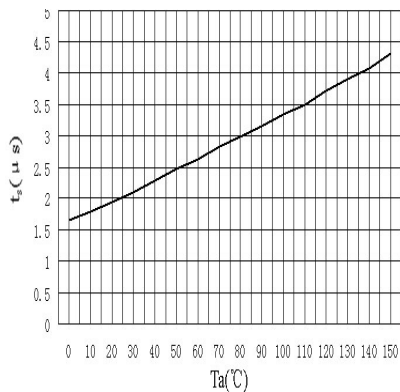
$V_{CESat} - I_c$



$V_{BESat} - I_c$



$t_s - T_a$



$h_{FE} - T_a$

