

**MJE13003V15 (3DD13003V15) 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。

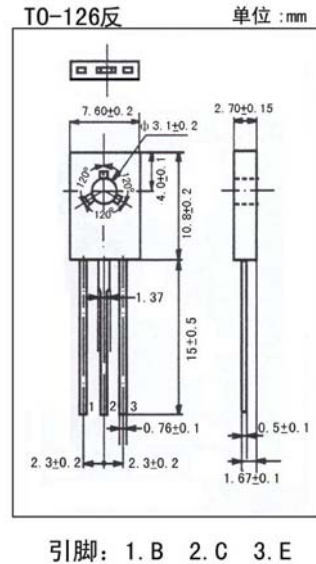
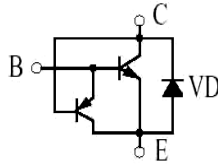
Purpose:High voltage capability,high speed switching,wide SOA.

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>CBO</sub>	400	V
V <sub>CEO</sub>	200	V
V <sub>EBO</sub>	9	V
I <sub>C</sub>	2.5	A
P <sub>C</sub>	1.25	W
P <sub>C</sub> (Tc=25°C)	20	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-55~150	°C

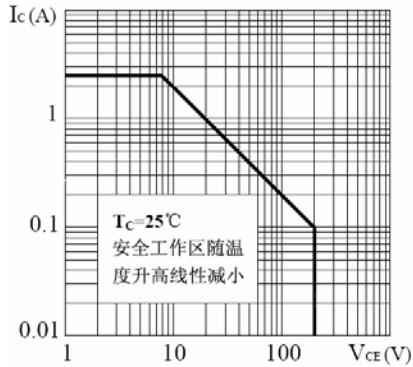


电性能参数/Electrical characteristics(Tc=25°C)

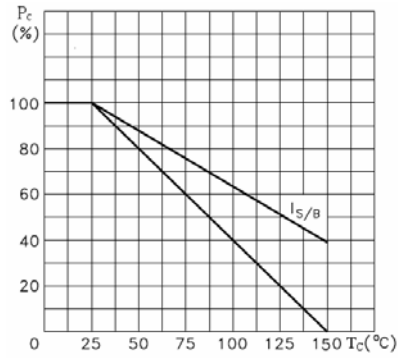
参数符号 Symbol	测试条件 Test Condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
V <sub>CBO</sub>	I <sub>C</sub> =1mA	I <sub>E</sub> =0	400			V
V <sub>CEO</sub>	I <sub>C</sub> =10mA	I <sub>B</sub> =0	200			V
V <sub>EBO</sub>	I <sub>E</sub> =1mA	I <sub>C</sub> =0	9			V
I <sub>CBO</sub>	V <sub>CB</sub> =400V	I <sub>E</sub> =0			0.1	mA
I <sub>CEO</sub>	V <sub>CE</sub> =200V	I <sub>B</sub> =0			0.1	mA
I <sub>EBO</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> =1mA	7			
h <sub>FE(3)</sub>	V <sub>CE</sub> =5.0V	I <sub>C</sub> =2.5A	5			
V <sub>Ces(1)</sub>	I <sub>C</sub> =2.5A	I <sub>B</sub> =0.5A			1.3	V
V <sub>Cesat(2)</sub>	I <sub>C</sub> =1.0A	I <sub>B</sub> =0.2A			0.5	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =2.5A	I <sub>B</sub> =0.5A			1.5	V
t <sub>s</sub>	V <sub>CE</sub> =5V I <sub>C</sub> =0.25A (UI9600)		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

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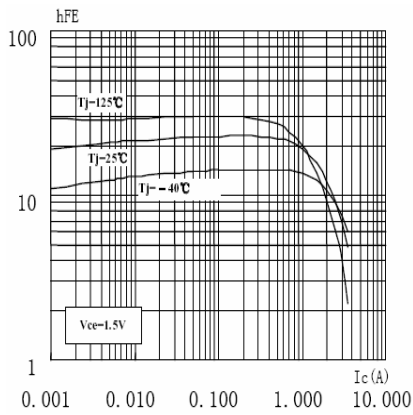
SOA (DC)



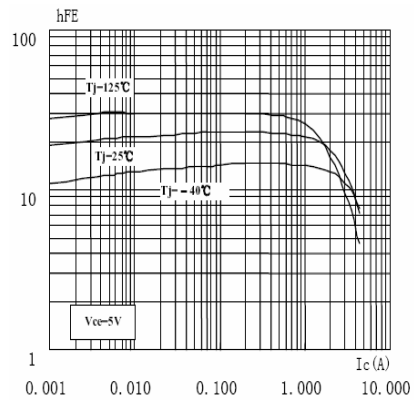
$P_c-T_c$



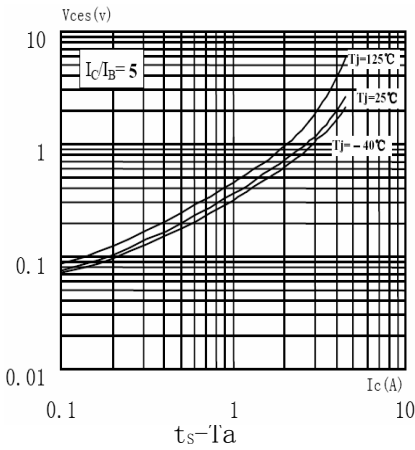
$h_{FE}-I_c$



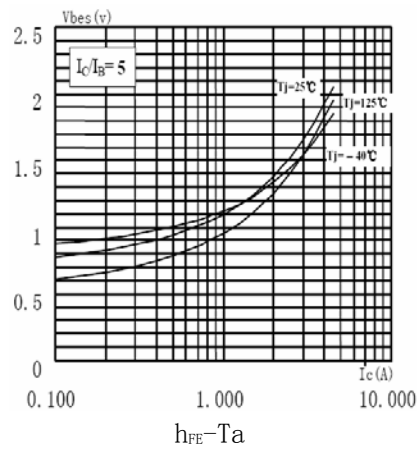
$h_{FE}-I_c$



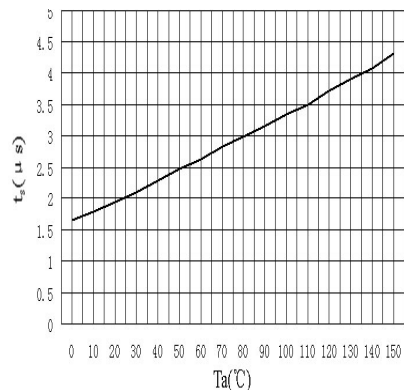
$V_{ces}-I_c$



$V_{bes}-I_c$



$t_s-t_a$



$h_{FE}-T_a$

