

**NPN D 系列晶体管/ D SERIES TRANSISTORS**

**BLD123D**

- 特点: 耐压高 开关速度快 安全工作区宽 符合 RoHS 规范
- FEATURES: ■HIGH VOLTAGE CAPABILITY ■HIGH SPEED SWITCHING ■WIDE SOA ■RoHS COMPLIANT
- 应用: 电子镇流器 节能灯
- APPLICATIONS: ■ELECTRONIC BALLAST ■FLUORESCENT LAMP

●最大额定值 (Tc=25°C)  
●Absolute Maximum Ratings (Tc=25°C) **SOT-89**

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
集电极-基极电压 Collector-Base Voltage	V <sub>CB0</sub>	700	V
集电极-发射极电压 Collector-Emitter Voltage	V <sub>CEO</sub>	400	V
发射极-基极电压 Emitter-Base Voltage	V <sub>EBO</sub>	9	V
集电极电流 Collector Current	I <sub>C</sub>	2.0	A
集电极耗散功率 Total Power Dissipation	P <sub>tot</sub>	18	W
最高工作温度 Junction Temperature	T <sub>j</sub>	150	°C
贮存时间 Storage Temperature	T <sub>stg</sub>	-65-150	°C



●电特性 (Tc=25°C)  
●Electrical Characteristics (Tc=25°C)

参数名称 CHARACTERISTIC	符号 SYMBOL	测试条件 TEST CONDITION	最小值 MIN	最大值 MAX	单位 UNIT
集电极-基极截止电流 Collector-Base Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =700V		100	μA
集电极-发射极截止电流 Collector-Emitter Cutoff Current	I <sub>CEO</sub>	V <sub>CE</sub> =400V, I <sub>B</sub> =0		250	μA
集电极-基极电压 Collector-Base Voltage	V <sub>CB0</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	700		V
集电极-发射极电压 Collector-Emitter Voltage	V <sub>CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	400		V
发射极-基极电压 Emitter-Base Voltage	V <sub>EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	9		V
集电极-发射极饱和电压 Collector-Emitter Saturation Voltage	V <sub>cesat</sub>	I <sub>C</sub> =200mA, I <sub>B</sub> =20mA		0.3	V
		I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A		0.4	
		I <sub>C</sub> =1.5A, I <sub>B</sub> =0.5A		0.9	
发射极-基极饱和电压 Base-Emitter Saturation Voltage	V <sub>besat</sub>	I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A		1.2	V
电流放大倍数 DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	7		
		V <sub>CE</sub> =5V, I <sub>C</sub> =0.2A	10	40	
		V <sub>CE</sub> =5V, I <sub>C</sub> =2.0A	5		
贮存时间/Storage Time	t <sub>s</sub>	V <sub>CC</sub> =5V, I <sub>C</sub> =0.25A (UI9600)	2.0	4.0	μs
下降时间 Falling Time	t <sub>f</sub>			0.8	μs
内置二极管正向压降/ Diode Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.0A		2.2	V

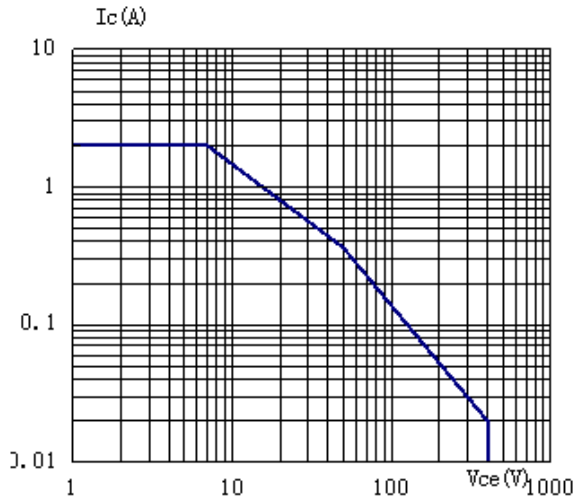
●订单信息/ORDERING INFORMATION:

包装形式/PACKING	订货编码/ORDERING CODE	
	普通塑封料/ Normal Package Material	无卤塑封料/Halogen Free
SOT-89 盘式编带/TAPE&REEL	BLD123D SOT-89-TR	BLD123D SOT-89-TR-HF

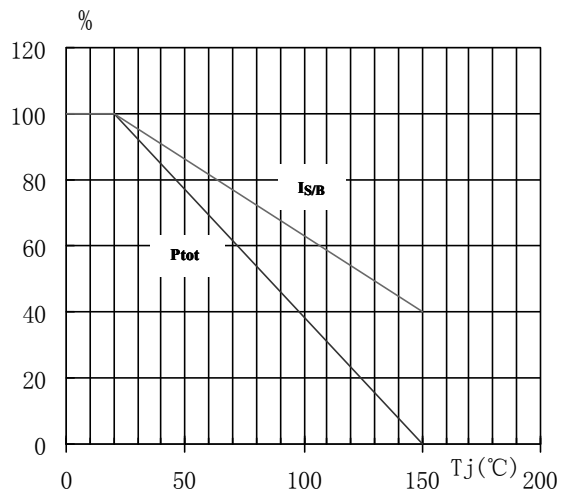
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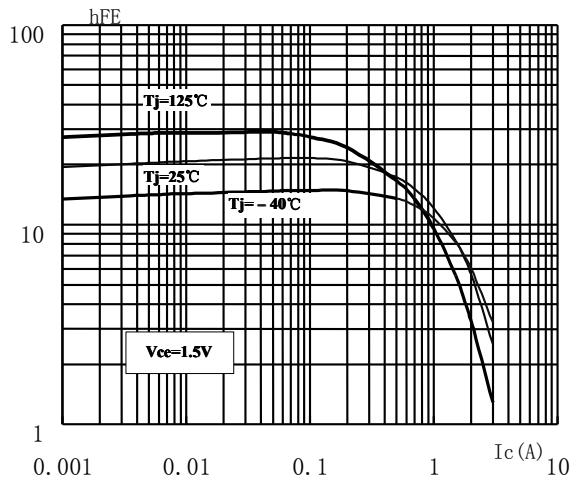
SOA (DC)



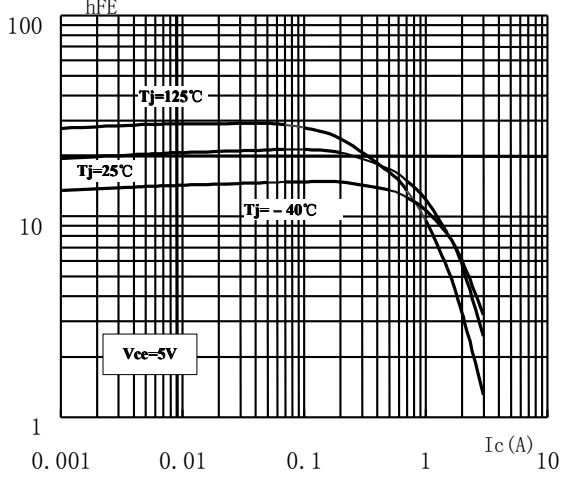
$P_{tot} \propto T_j$



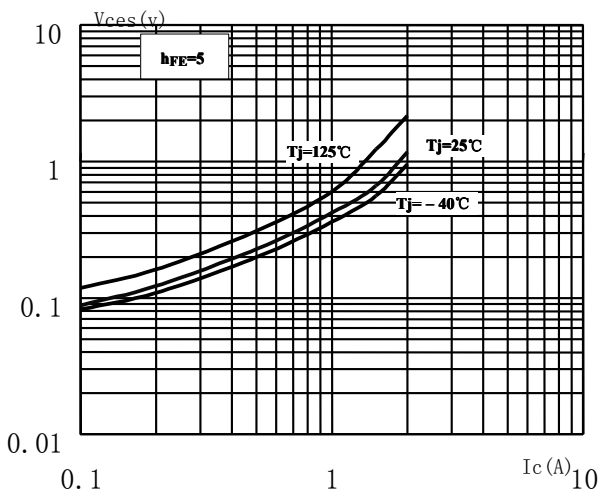
$h_{FE} - I_c$



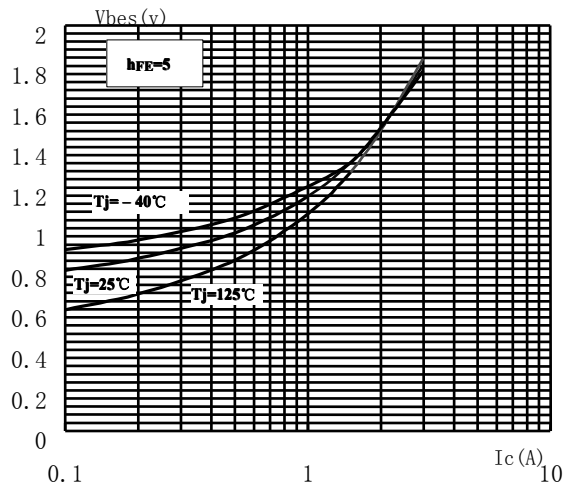
$h_{FE} - I_c$



$V_{cesat} - I_c$



$V_{besat} - I_c$



## SOT-89 封装机械尺寸

### SOT-89 MECHANICAL DATA

单位:毫米/UNIT: mm

符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	4.4		4.7
B	2.35		2.65
C	3.878		4.478
D	1.45		1.65
E	0.8		1.2
F	0.3		0.5
G	1.40		1.60
H	2.8		3.2
I	0.36		0.56
J	0.35		0.5
K		6°	
L	1.4		1.7

L

