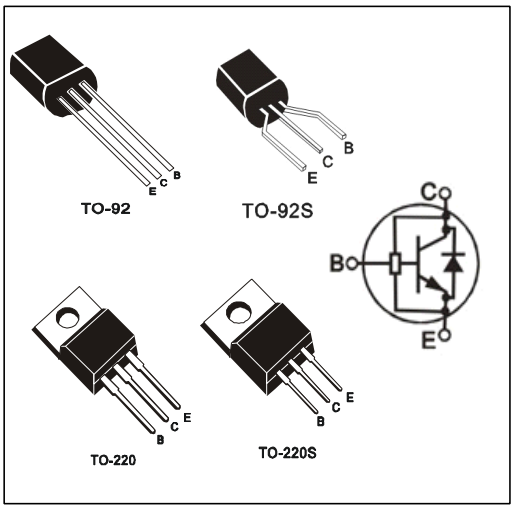
NPN D 系列晶体管/ D SERIES TRANSISTORS BLD123D

●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） TO-92/92S/220/220S

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
集电极-基极电压 Collector-Base Voltage	V_{CBO}	600	V
集电极-发射极电压 Collector-Emitter Voltage	V_{CEO}	400	V
发射极-基极电压 Emitter-Base Voltage	V_{EBO}	9	V
集电极电流 Collector Current	I_C	2.0	A
集电极耗散功率 Total Power Dissipation	P_{tot}	TO-92/92S:18 TO-220/220S:40	W
最高工作温度 Junction Temperature	Tj	150	°C
贮存时间 Storage Temperature	Tstg	-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 Currentt	I_{CBO}	V_{CB}=600V		100	μA
集电极-发射极截止电流 Collector-Emitter Cutoff Current	I_{CEO}	V_{CE}=400V,I_B=0		250	μA
集电极-基极电压 Collector-Base Voltage	V_{CBO}	IC=1mA,IE=0	600		V
集电极-发射极电压 Collector-Emitter Voltage	V_{CEO}	I_C=10mA,I_B=0	400		V
发射极-基极电压 Emitter-Base Voltage	V_{EBO}	I_E=1mA,I_C=0	9		V
集电极-发射极饱和电压 Collector-Emitter Saturation Voltage	Vcesat	I_C=200mA,I_B=20mA		0.3	V
		I_C=0.5A,I_B=0.1A		0.4	
		I_C=1.5A,I_B=0.5A		0.9	
发射极-基极饱和电压 Base-Emitter Saturation Voltage	Vbesat	Ic=0.5A,Ib=0.1A		1.2	V
电流放大倍数 DC Current Gain	h_{FE}	V_{CE}=5V,I_C=1mA	7		
		V_{CE}=5V,I_C=0.2A	10	40	
		V_{CE}=5V,I_C=2.0A	5		
贮存时间/Storage Time	t_s	V_{CC}=5V,I_C=0.25A (UI9600)	2.0	4.0	μs
下降时间啊/Falling Time	t_f			0.8	μs
内置二极管正向压降/ Dioad Forward Voltage	V_F	I_F=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/ Nornal Package Material	无卤塑封料/Halogen Free
TO-92 普通袋装/NORMAL PACKING	BLD123D TO-92	BLD123D TO-92-HF
TO-92S 普通袋装/NORMAL PACKING	BLD123D TO-92S	BLD123D TO-92S-HF
TO-92 盒式编带/AMMOPACK	BLD123D TO-92-AP	BLD123D TO-92-AP-HF
TO-220 普通袋装/NORMAL PACKING	BLD123D TO-220	BLD123D TO-220-HF
TO-220S 普通袋装/NORMAL PACKING	BLD123D TO-220S	BLD123D TO-220S -HF
TO-220 条管//TUBE PACKING	BLD123D TO-220-TU	BLD123D TO-220-TU-HF

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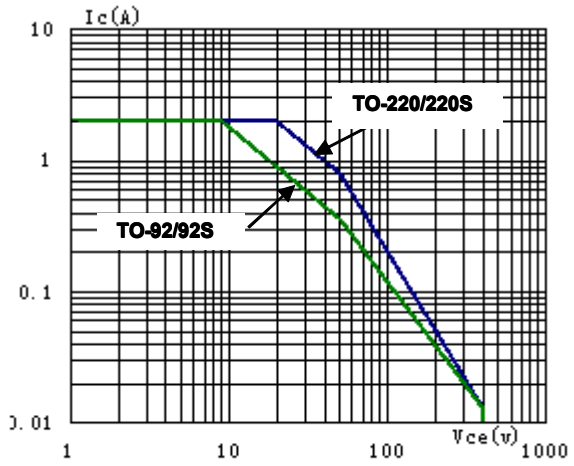
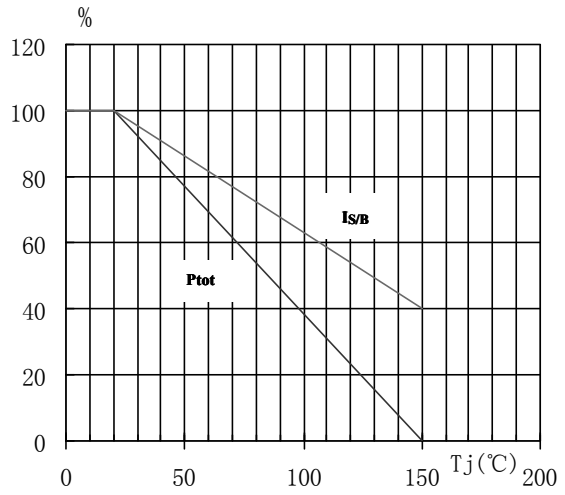
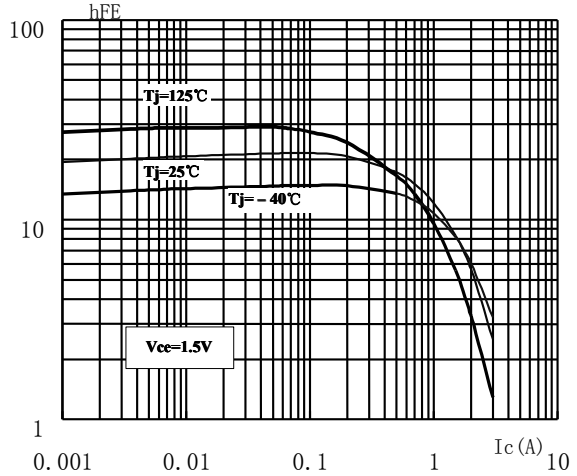
SOA (DC)



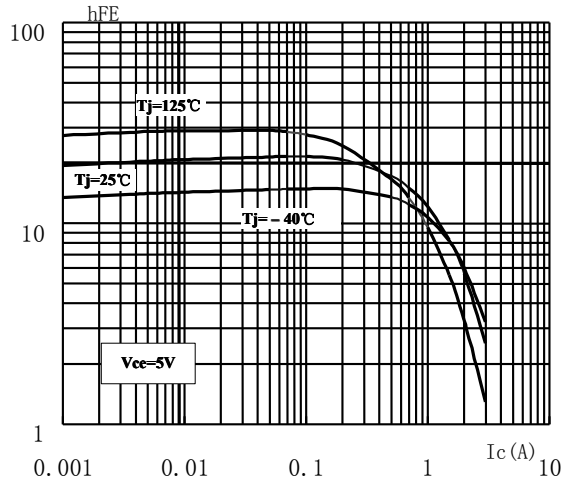
$P_{tot} \propto Tj$



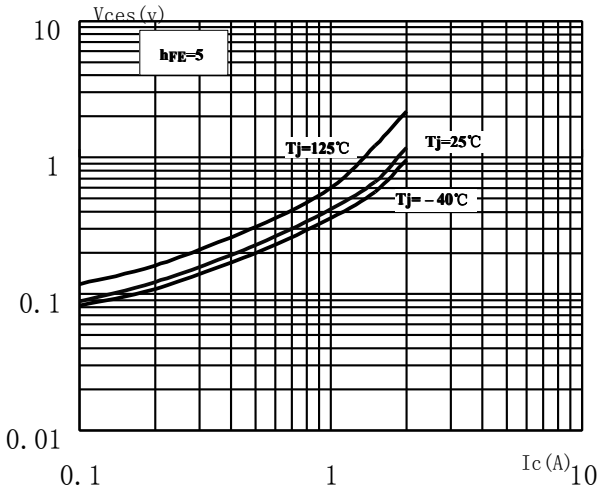
h_{FE} - Ic



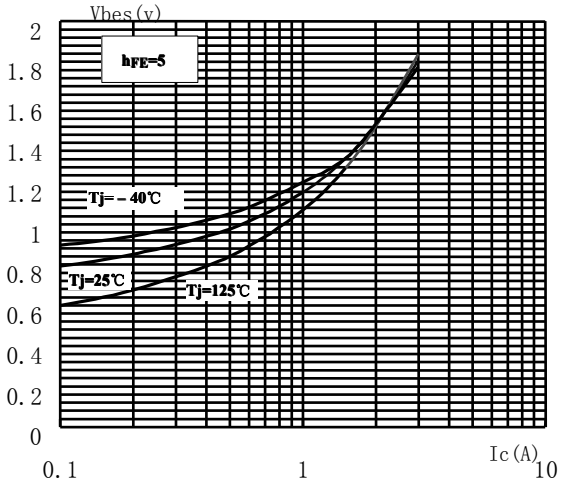
h_{FE} - Ic



Vcesat - Ic



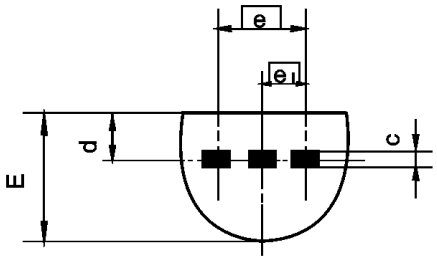
Vbesat - Ic

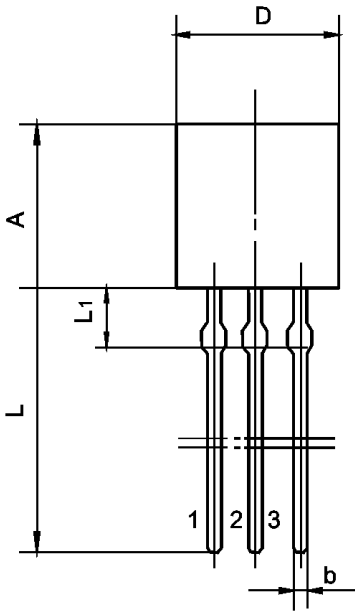


TO-92 封装机械尺寸
TO-92 MECHANICAL DATA

单位:毫米/UNIT：mm

符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	4.30		5.30
b	0.30		0.55
c	0.30		0.50
φD D	4.30		5.20
d	1.00		1.70
E	3.20		4.20
e		2.54	
e1		1.27	
L	12.70		15.00
L1	1.50		2.00

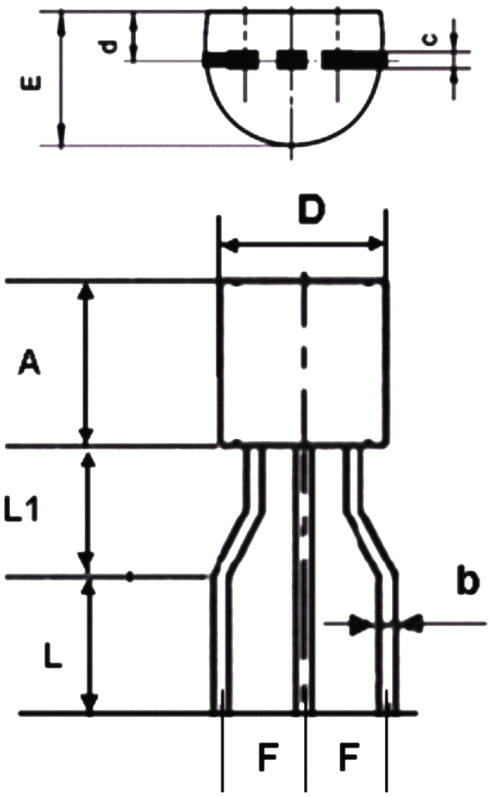




TO-92S 封装机械尺寸
TO-92S MECHANICAL DATA

单位:毫米/UNIT：mm

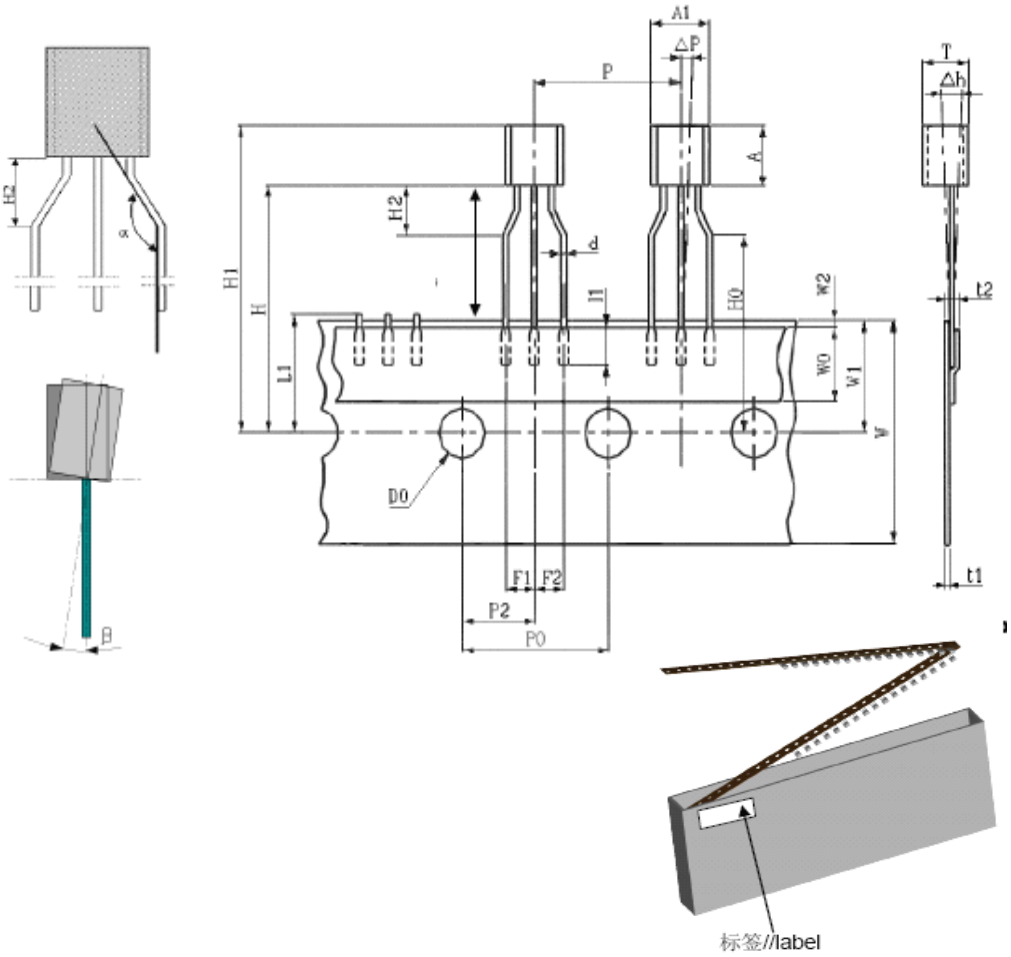
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	4.30		5.30
b	0.30		0.55
c	0.30		0.50
D(φD)	4.30		5.20
d	1.00		1.70
E	3.20		4.20
F	2.25	2.40	2.55
L	3.20		3.80
L1	2.60		2.70



TO-92-AP 编带规格尺寸
TO-92 AMMOPACK DATA

单位:毫米/UNIT：mm

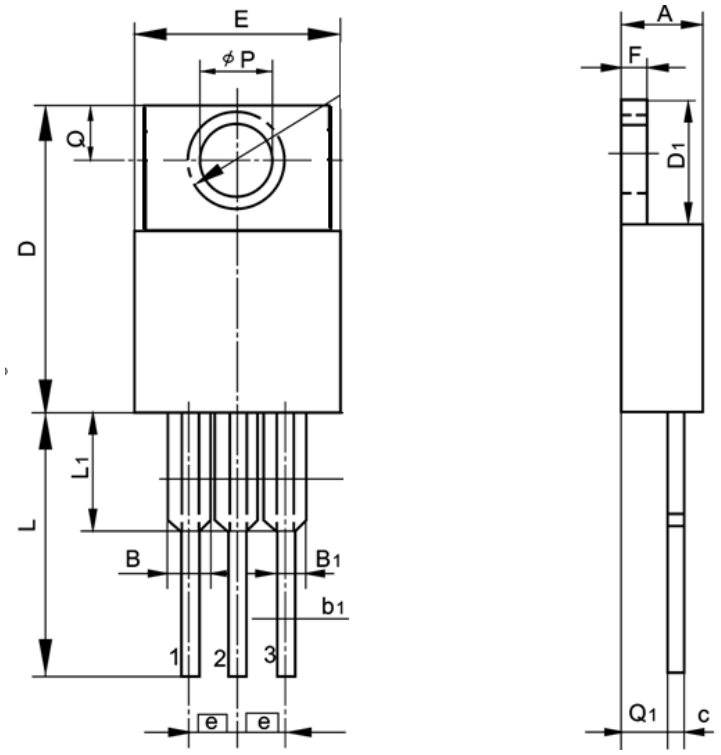
符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	4.30		5.30	d	0.30		0.55
A1	4.30		5.20	T	3.20		4.20
DO	3.80	4.00	4.20	β	-	-	2° 10’
F1/F2	2.25	2.40	2.55	l1	2.50		
P	11.70	12.70	13.70	L1			11.00
PO	12.40	12.70	13.00	W	17.50	18.00	19.00
P2	5.95	6.35	6.75	W0	5.70	6.00	6.30
H	18.35		19.45	W1	8.50	9.00	9.75
H0	15.50	16.00	16.50	W2			0.50
H1			24.50	Δh	-1.00	0.00	1.00
H2	2.60		2.70	ΔP	-1.00	0.00	1.00
H3	9.50			t1	0.35		0.65
α	130°	135°	140°	t2			1.44
盒装量/BASE QUANTITY：3000pcs/box							



TO-220 封装机械尺寸
TO-220 MECHANICAL DATA

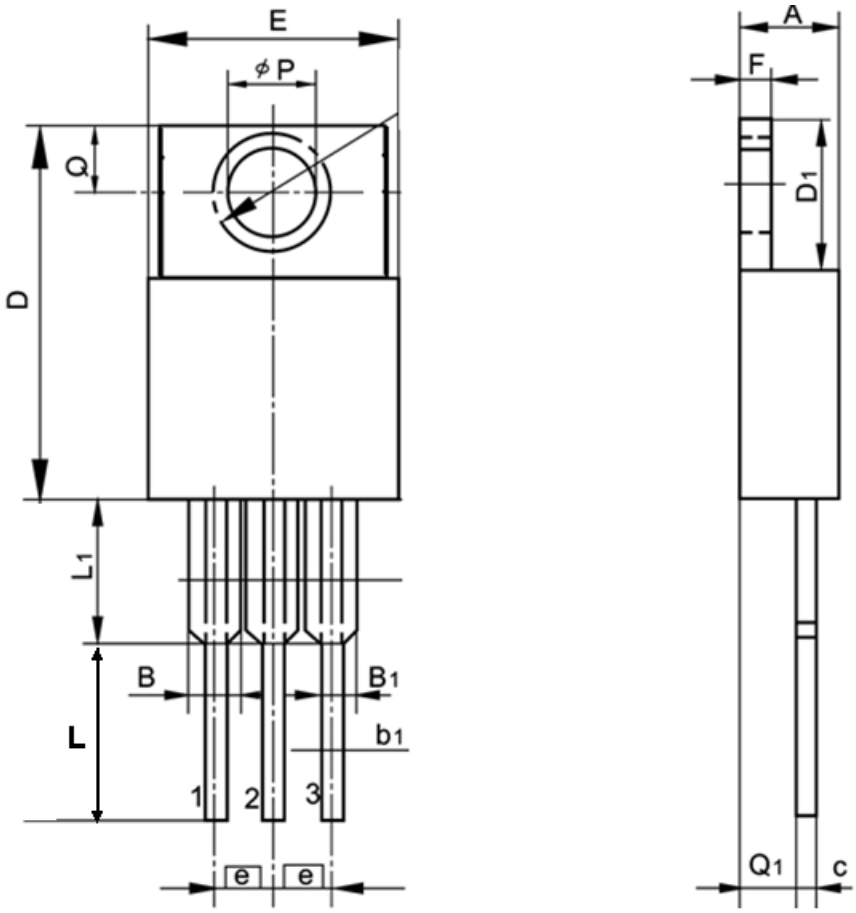
单位：毫米/UNIT：mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	4.00		4.80	E	9.90		10.70
B	1.20		1.50	e		2.54	
B1	1.00		1.40	F	1.10		1.45
b1	0.65		1.00	L	12.50		14.50
c	0.35		0.75	L1	3.00	3.50	4.00
D	15.00		16.50	Q	2.50		3.00
D1	5.90		6.90	Q1	2.00		3.00
				ϕP	3.60		3.90



TO-220S 封装机械尺寸

TO-220S MECHANICAL DATA

单位：毫米/UNIT：mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	4.00		4.80	E	9.90		10.70
B	1.27		1.50	e		2.54	
B1			1.40	F	1.20		1.45
b1	0.75		1.00	L	3.20		3.80
c	0.38		0.75	L1			3.50
D	15.00		16.5	φP	3.60		3.90
D1	5.90		6.60	Q	2.50		3.00
				Q1	2.00		3.00