

NPN D 系列晶体管/ D SERIES TRANSISTORS

BLD102D

特点: 耐压高 开关速度快 安全工作区宽 符合 RoHS 规范

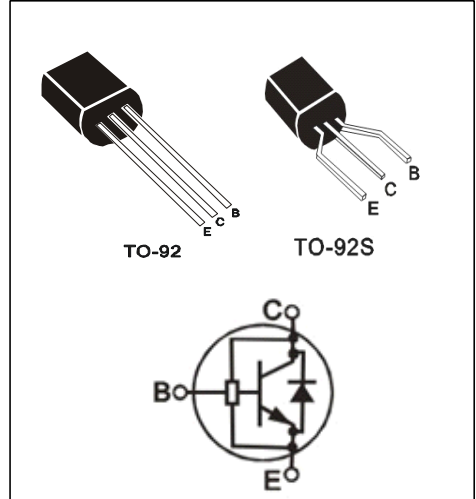
- **FEATURES:** ■HIGH VOLTAGE CAPABILITY ■HIGH SPEED SWITCHING ■WIDE SOA ■RoHS COMPLIANT
- **应用:** 节能灯 电子镇流器
- **APPLICATION:** ■FLUORESCENT LAMP ■ELECTRONIC BALLAST

●最大额定值 (Tc=25°C)

●Absolute Maximum Ratings (Tc=25°C)

TO-92/92S

| 参数 PARAMETER | 符号 SYMBOL | 额定值 VALUE | 单位 UNIT |
|--|------------------|--------------|------------|
| 集电极-基极电压 Collector-Base Voltage | V _{CB0} | 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 | 0.8 | A |
| 集电极耗散功率 Total Power Dissipation | P _{tot} | 10 | W |
| 最高工作温度 Junction Temperature | T _j | 150 | °C |
| 贮存温度 Storage Temperature | T _{stg} | -65-150 | °C |



●电特性 (Tc=25°C)

●Electronic Characteristics (Tc=25°C)

| 参数名称 CHARACTERISTICS | 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 _{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 _{CB0} | I _C =1mA, I _E =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 | V _{cesat} | I _C =100mA, I _B =10mA | | 0.3 | V |
| | | I _C =0.5A, I _B =0.1A | | 0.6 | |
| 发射极-基极饱和电压 Base-Emitter Saturation Voltage | V _{besat} | I _C =100mA, I _B =10mA | | 1.0 | V |
| 电流放大倍数 DC Current Gain | h _{FE} | V _{CE} =5V, I _C =1mA | 7 | | |
| | | V _{CE} =5V, I _C =0.1A | 10 | 40 | |
| | | V _{CE} =5V, I _C =0.8A | 5 | | |
| 贮存时间/Storage Time | t _s | V _{CC} =5V, I _C =0.1A, (UI9600) | 2.0 | 4.0 | μs |
| 下降时间/Falling Time | t _f | | | 0.8 | |
| 内置二极管正向压降 Diode Forward Voltage | V _F | I _F =0.5A | | 2.0 | V |

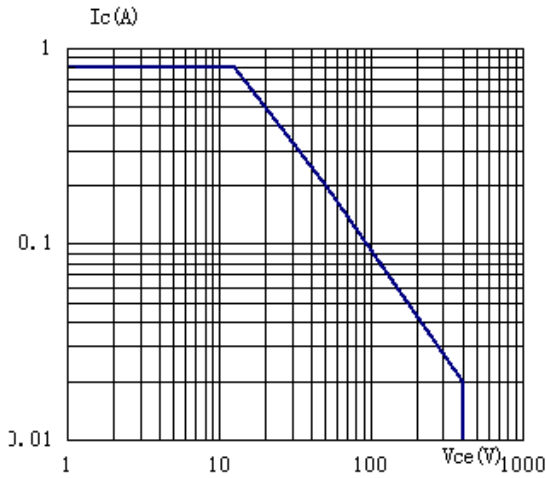
●订单信息/ORDERING INFORMATION:

| 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 |
| TO-92 普通袋装/NORMAL PACKING | BLD102D TO-92 | BLD102D TO-92-HF |
| TO-92S 普通袋装/NORMAL PACKING | BLD102D TO-92S | BLD102D TO-92S-HF |
| TO-92 盒式编带/AMMOPACK | BLD102D TO-92-AP | BLD102D TO-92-AP-HF |

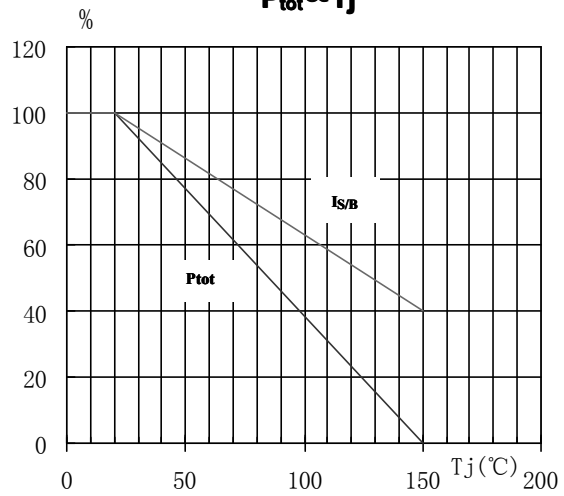
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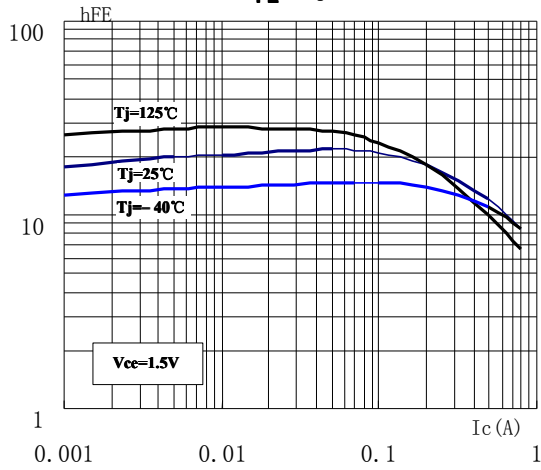
SOA (DC)



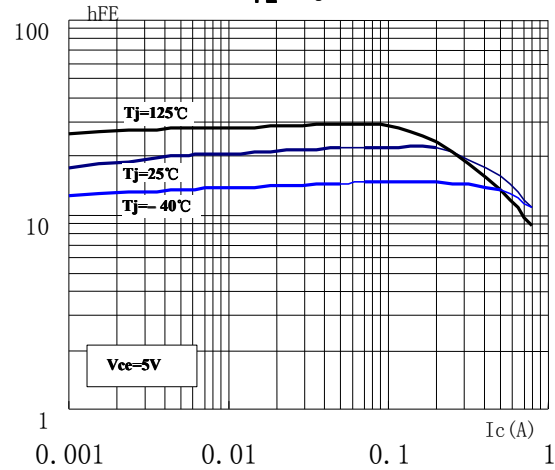
$P_{tot} \propto T_j$



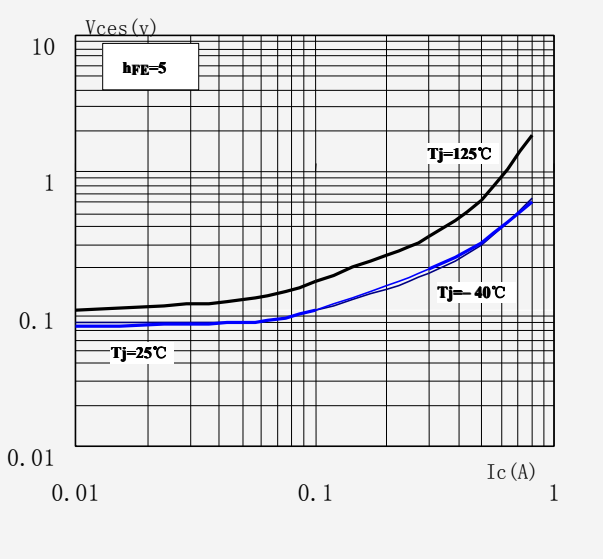
$h_{FE} - I_c$



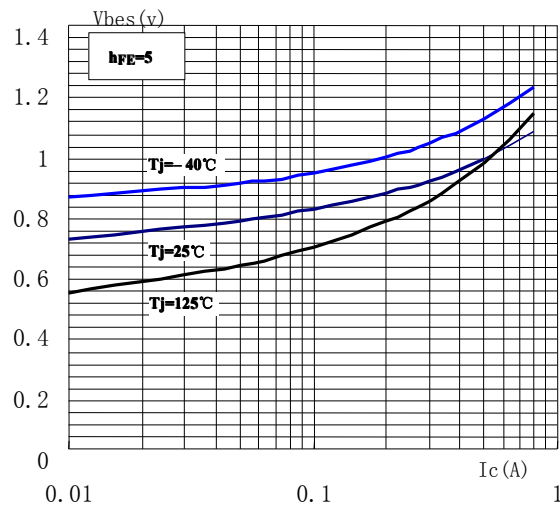
$h_{FE} - I_c$



$V_{cesat} - I_c$



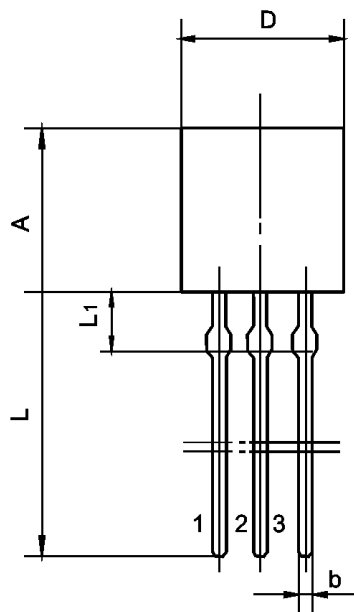
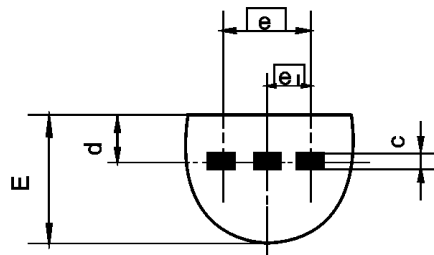
$V_{besat} - I_c$



TO-92 封装机械尺寸 TO-92 MECHANICAL DATA

单位:毫米/UNIT: mm

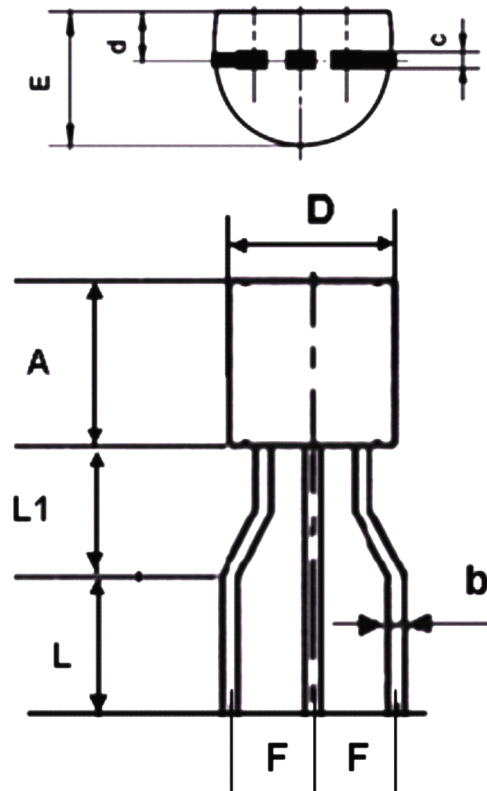
| 符号/SYMBOL | 最小值/min | 典型值/nom | 最大值/max |
|------------------|---------|---------|---------|
| A | 4.30 | | 5.30 |
| b | 0.30 | | 0.55 |
| c | 0.30 | | 0.50 |
| φD D | 4.30 | | 5.20 |
| d | 1.00 | | 1.70 |
| E | 3.20 | | 4.20 |
| e | | 2.54 | |
| e1 | | 1.27 | |
| L | 12.70 | | 15.00 |
| L1 | 1.50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

