



# 3DD4251T

## 主要参数 MAIN CHARACTERISTICS

$I_c$	0.5A
$V_{CEO}$	400V
$P_c(TO-92/TO-92-FJ)$	1W

### 用途

- 节能灯
- 电子镇流器
- 高频开关电源
- 高频功率变换
- 一般功率放大电路

### 产品特性

- 高耐压
- 高电流容量
- 高开关速度
- 高可靠性
- 环保 (RoHS) 产品

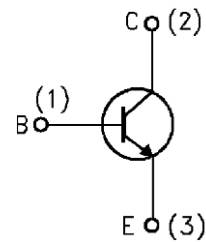
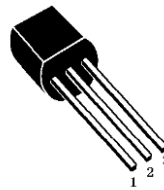
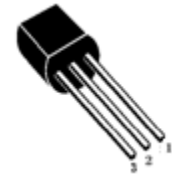
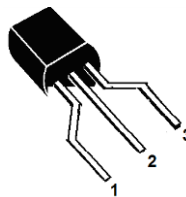
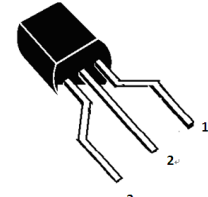
### APPLICATIONS

- Energy-saving light
- Electronic ballasts
- High frequency switching power supply
- High frequency power transform
- Commonly power amplifier

### FEATURES

- High breakdown voltage
- High current capability
- High switching speed
- High reliability
- RoHS product

## 封装 Package

**TO-92****TO-92-FJ****TO-92-F1****TO-92-FJ-F1**

## 订货信息 ORDER MESSAGE

订货型号 Order codes				印 记 Marking	封 装 Package
有卤-编带	有卤-编带	有卤-袋装	有卤-袋装		
Halogen-Reel	Halogen-Free-Reel	Halogen-Bag	Halogen-Free-Bag	4251T	TO-92-FJ
3DD4251T-TJ-A	3DD4251T-TJ-AR	3DD4251T-TJ-C	3DD4251T-TJ-CR	4251T	TO-92
3DD4251T-T-A	3DD4251T-T-AR	3DD4251T-T-C	3DD4251T-T-CR	4251T	TO-92-F1
3DD4251T-T1-A	3DD4251T-T1-AR	3DD4251T-T1-C	3DD4251T-T1-CR	4251T	TO-92-FJ-F1
3DD4251T-TJ1-A	3DD4251T-TJ1-AR	3DD4251T-TJ1-C	3DD4251T-TJ1-CR	4251T	TO-92-FJ-F1



绝对最大额定值 ABSOLUTE RATINGS ( $T_c=25^\circ\text{C}$ )

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
集电极—发射极直流电压 Collector-Emitter Voltage ( $V_{BE}=0$ )	$V_{CES}$	700	V
集电极—发射极直流电压 Collector-Emitter Voltage ( $I_B=0$ )	$V_{CEO}$	400	V
发射极—基极直流电压 Emitter-Base Voltage	$V_{EBO}$	9	V
最大集电极直流电流 Collector Current (DC)	$I_C$	0.5	A
最大集电极脉冲电流 Collector Current (pulse)	$I_{CP}$	1	A
最大集电极耗散功率 Total Dissipation (TO-92/TO-92-FJ)	$P_C$	1	W
最高结温 Junction Temperature	$T_j$	150	$^\circ\text{C}$
贮存温度 Storage Temperature	$T_{stg}$	-55~+150	$^\circ\text{C}$

## 电特性 ELECTRICAL CHARACTERISTIC

项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	400	440	-	V
$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	700	780	-	V
$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	9	15	-	V
$I_{CBO}$	$V_{CB}=700\text{V}, I_E=0$	-	-	5	$\mu\text{A}$
$I_{CEO}$	$V_{CE}=400\text{V}, I_B=0$	-	-	10	$\mu\text{A}$
$I_{EBO}$	$V_{EB}=9\text{V}, I_C=0$	-	-	5	$\mu\text{A}$
hFE	$V_{CE}=10\text{V}, I_C=20\text{mA}$	19	-	25	-
$V_{CE(sat)}$	$I_C=0.1\text{A}, I_B=10\text{mA}$	-	0.2	1.0	V
$V_{BE(sat)}$	$I_C=0.05\text{A}, I_B=5\text{mA}$	-	0.8	1.2	V
ts	$I_C=0.1\text{A}$	1.0-1.5-2.0			$\mu\text{S}$

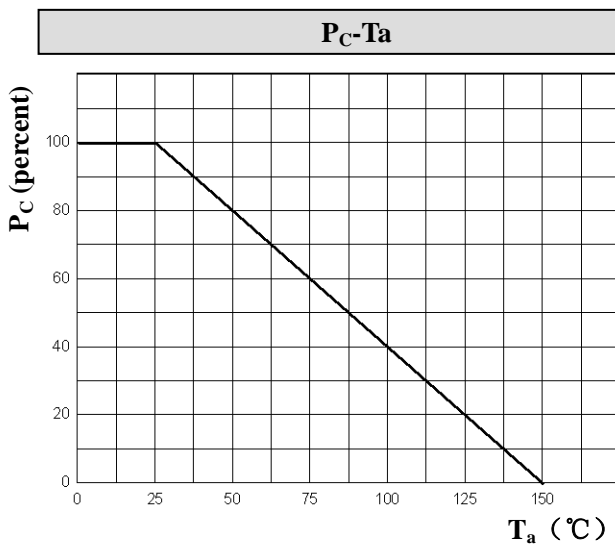
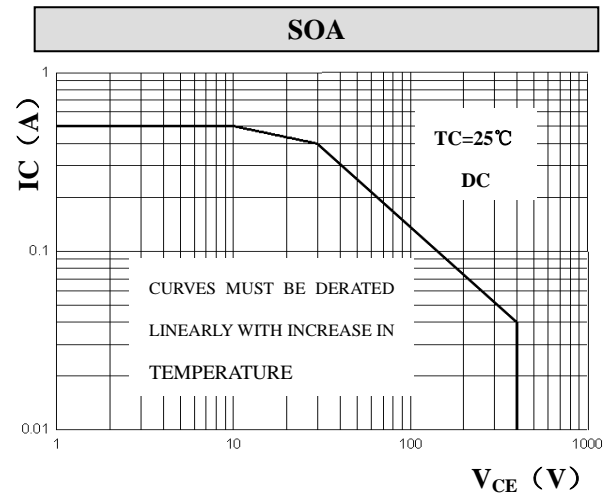
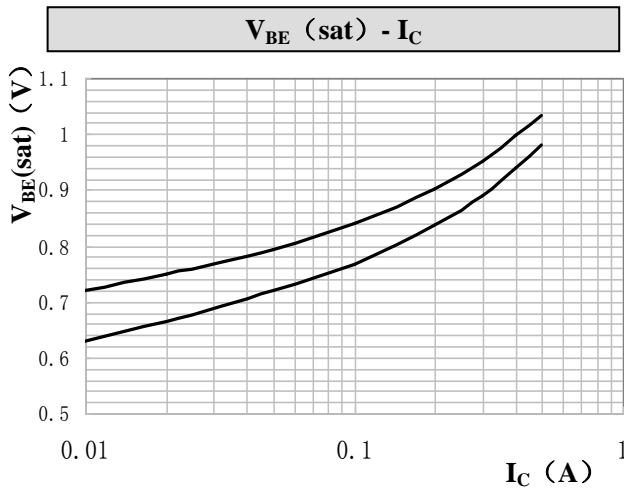
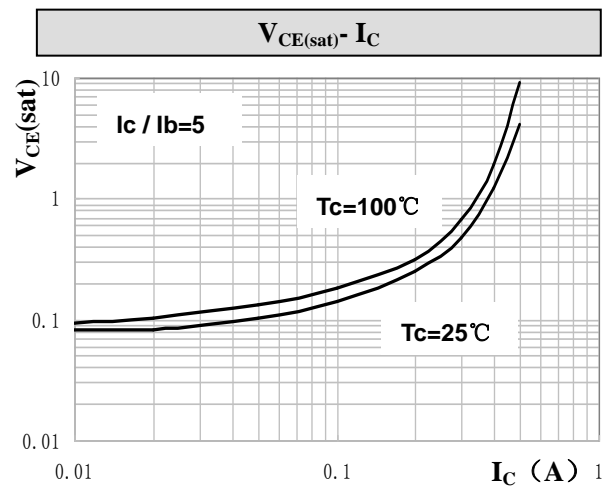
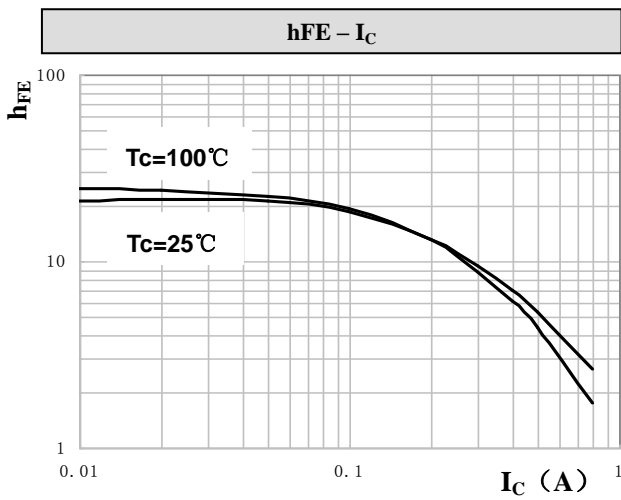
## 热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到环境的热阻 TO-92 /TO-92-FJ Thermal Resistance Junction Ambient	$R_{th(j-a)}$	-	125	$^\circ\text{C/W}$





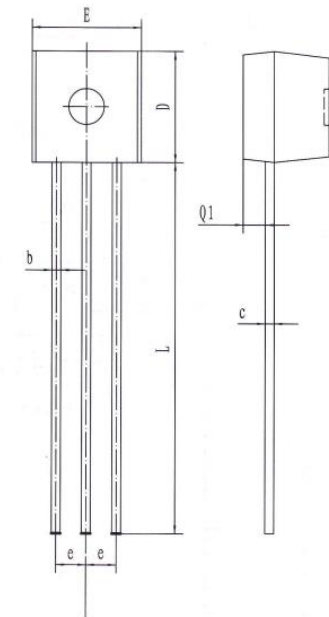
特征曲线 ELECTRICAL CHARACTERISTICS (curves)



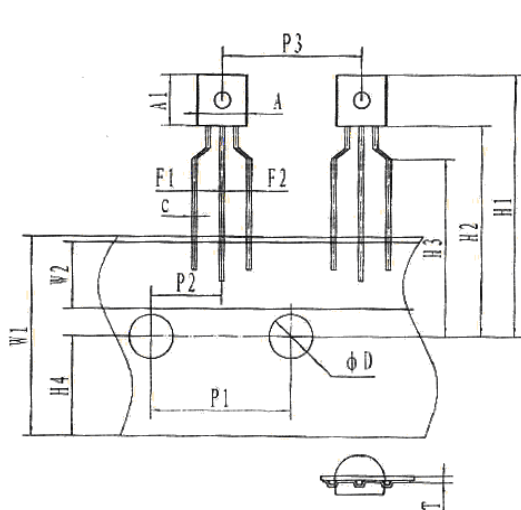
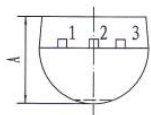


外形尺寸 PACKAGE MECHANICAL DATA  
TO-92/TO-92-FJ

单位 Unit : mm



符号 Symbol	尺寸 (mm) Size (mm)
A	3.30-3.90
b	0.35-0.55
c	0.31-0.51
D	4.30-4.90
E	4.30-4.90
e	1.17-1.37
L	12.50-15.50
Q1	0.85-1.00



符号 Symbol	尺寸 (mm) Size (mm)
A	4.30-4.90
A1	4.30-4.90
A2	3.30-3.90
c	TYP 0.45
F1/F2	2.20-2.80
W1	17.5-18.5
W2	5.50-6.50
H1	22.0-27.0
H2	18.0-20.0
H3	15.0-17.0
H4	8.50-9.50
P1	12.5-12.9
P2	6.00-6.70
P3	12.5-12.9
T	0.40-0.45
φ D	3.80-4.20
ΔH	0.00-1.00

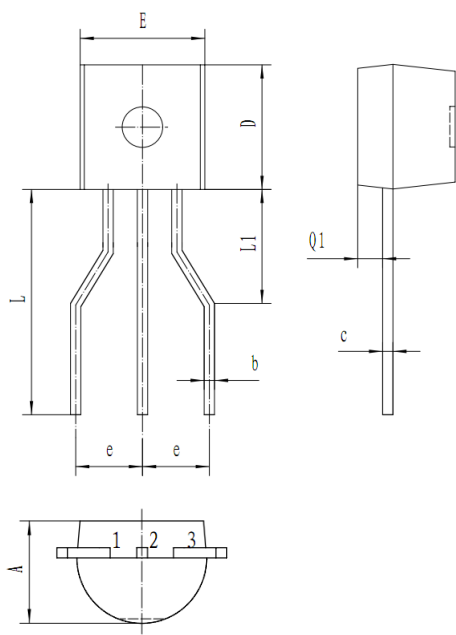




## 外形尺寸 PACKAGE MECHANICAL DATA

## TO-92-F1

单位 Unit : mm

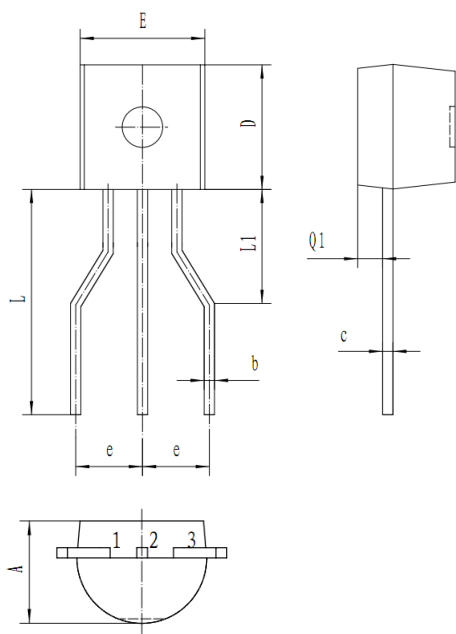


<b>A</b>	3.30-3.90
<b>b</b>	0.35-0.55
<b>c</b>	0.31-0.51
<b>D</b>	4.30-4.90
<b>E</b>	4.30-4.90
<b>e</b>	2.00-3.10
<b>L</b>	5.00-6.00
<b>L1</b>	2.70-3.30
<b>Q1</b>	0.85-1.00

## 外形尺寸 PACKAGE MECHANICAL DATA

## TO-92-FJ-F1

单位 Unit : mm



<b>A</b>	3.30-3.90
<b>b</b>	0.35-0.55
<b>c</b>	0.31-0.51
<b>D</b>	4.30-4.90
<b>E</b>	4.30-4.90
<b>e</b>	1.17-1.37
<b>L</b>	5.00-6.00
<b>L1</b>	2.70-3.30
<b>Q1</b>	0.85-1.00



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