



# 3DD4243D(T/I/M/Z)

## 主要参数 MAIN CHARACTERISTICS

$I_c$	2.0A
$V_{CE0}$	400V
$P_c(TO-92)$	1W
$P_c(TO-251)$	10W
$P_c(TO-126)$	20W
$P_c(TO-220)$	40W

## 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

## APPLICATIONS

- Electronic ballasts
- High frequency switching power supply
- High frequency power transform
- Commonly power amplifier circuit

## 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

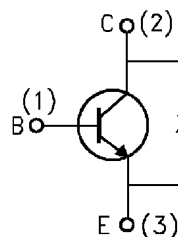
## FEATURES

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

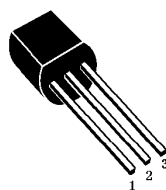
## 订货信息 ORDER MESSAGE

订货型号 Order codes	印记 Marking	无卤素 Halogen Free	封装 Package	包装 Packaging
3DD4243DT-O-T-B-A	4243DT	否 NO	TO-92	编带 Brede
3DD4243DT-O-T-N-C	4243DT	否 NO	TO-92	袋装 Bag
3DD4243DI-O-I-N-B	4243DI	否 NO	TO-251	条管 Tube
3DD4243DI-O-I-N-C	4243DI	否 NO	TO-251	袋装 Bag
3DD4243DM-O-M-N-B	4243DM	否 NO	TO-126	条管 Tube
3DD4243DM-O-M-N-C	4243DM	否 NO	TO-126	袋装 Bag
3DD4243DZ-O-Z-N-C	4243DZ	否 NO	TO-220	袋装 Bag
3DD4243DZ-O-Z-N-B	4243DZ	否 NO	TO-220	条管 Tube

## 封装 Package



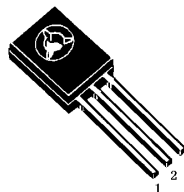
TO-92  
(3DD4243DT)



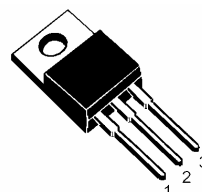
TO-251  
(3DD4243DI)



TO-126  
(3DD4243DM)



TO-220  
(3DD4243DZ)





## 绝对最大额定值 ABSOLUTE RATINGS (Tc=25°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)	$I_C$	2.0	A
最大集电极脉冲电流 Collector Current (pulse)	$I_{CP}$	4.0	A
最大集电极耗散功率 Total Dissipation (TO-92)	$P_C$	1	W
最大集电极耗散功率 Total Dissipation (TO-251)	$P_C$	10	W
最大集电极耗散功率 Total Dissipation (TO-126)	$P_C$	20	W
最大集电极耗散功率 Total Dissipation (TO-220)	$P_C$	40	W
最高结温 Junction Temperature	$T_j$	150	°C
贮存温度 Storage Temperature	$T_{stg}$	-55~+150	°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
$V(BR)_{CEO}$	$I_C=10mA, I_B=0$	400	460	-	V
$V(BR)_{CBO}$	$I_C=1mA, I_B=0$	700	800	-	V
$V(BR)_{EBO}$	$I_E=1mA, I_C=0$	9	16	-	V
$I_{CBO}$	$V_{CB}=700V, I_E=0$	-	-	5	$\mu A$
$I_{CEO}$	$V_{CE}=400V, I_B=0$	-	-	10	$\mu A$
$I_{EBO}$	$V_{EB}=9V, I_C=0$	-	-	5	$\mu A$
hFE	$V_{CE}=5V, I_C=200mA$	10	20	30	-
	$V_{CE}=5V, I_C=2.0A$	4	8	-	-
$V_{CE(sat)}$	$I_C=2.0A, I_B=0.4A$	-	0.8	1.1	V
$V_{BE(sat)}$	$I_C=1.0A, I_B=0.2A$	-	1.0	1.2	V
tf	$V_{CC}=24V, I_C=0.25A, I_{B1}=-I_{B2}=0.05A$	-	-	0.7	$\mu S$
ts		-	-	5	$\mu S$
ft	$V_{CE}=10V, I_C=0.1A$	4	-	-	MHz

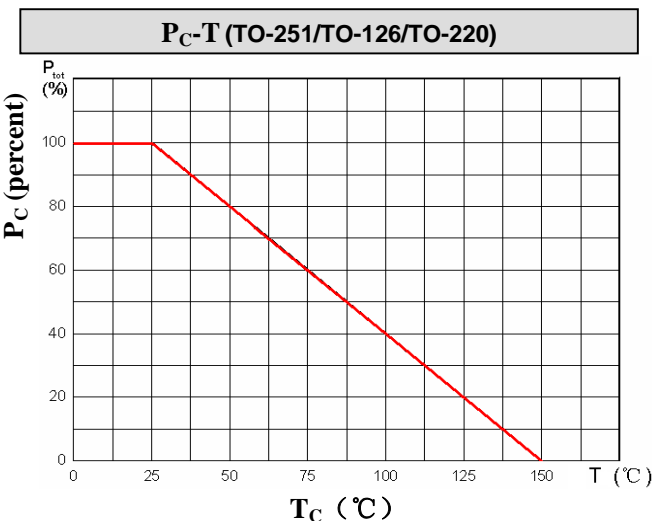
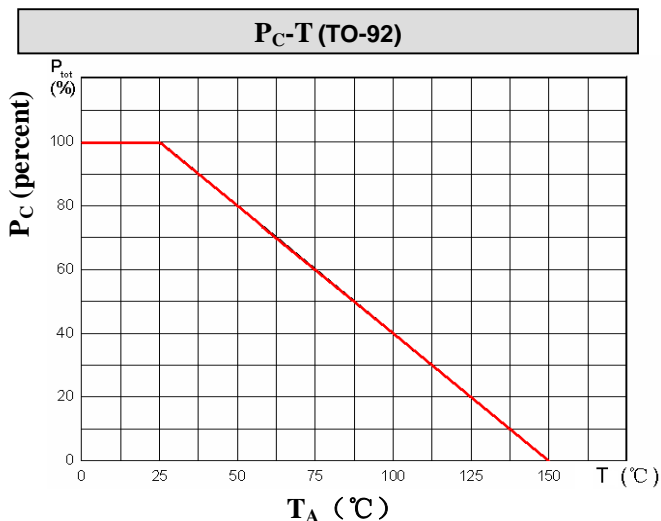
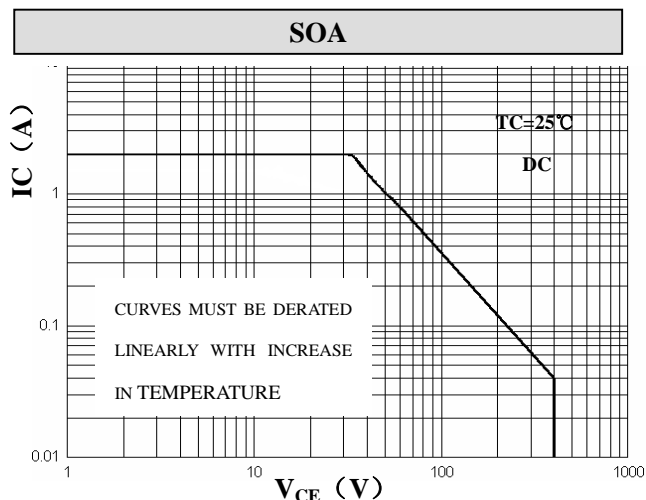
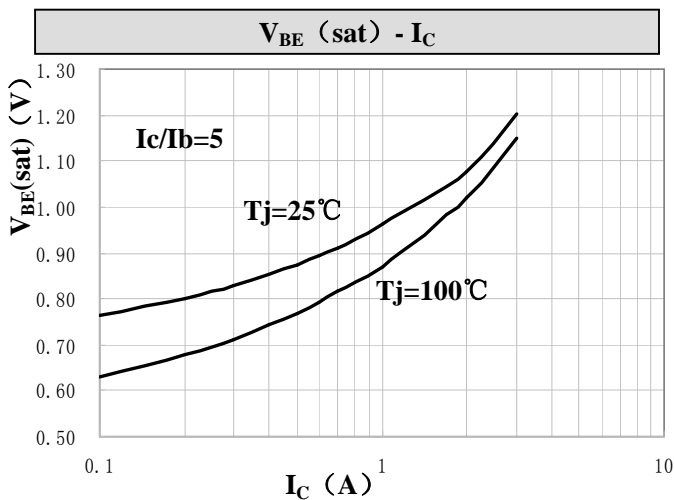
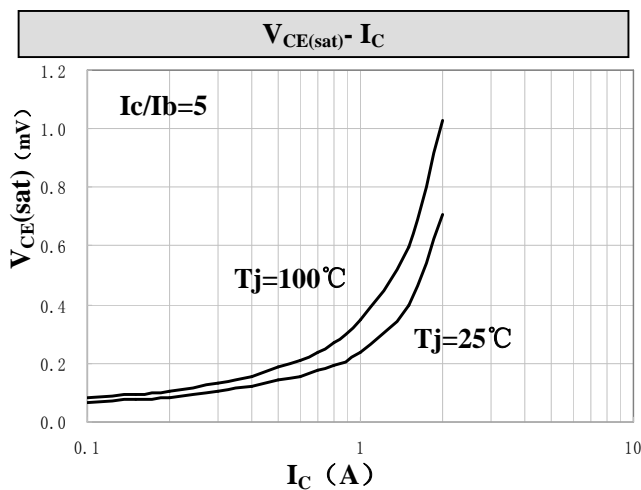
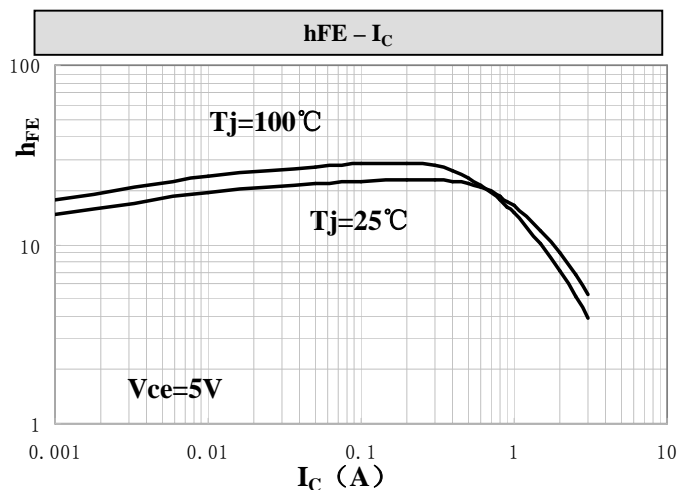
## 热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbo	最小值 min	最大值 max	单 位 Unit
结到环境的热阻 Thermal Resistance Junction Ambient TO-92	$R_{th(j-a)}$	-	125	°C/W
结到管壳的热阻 Thermal Resistance Junction Case TO-251	$R_{th(j-c)}$	-	12.5	°C/W
结到管壳的热阻 Thermal Resistance Junction Case TO-126	$R_{th(j-c)}$	-	6.25	°C/W
结到管壳的热阻 Thermal Resistance Junction Case TO-220	$R_{th(j-c)}$	-	3.125	°C/W





特征曲线 ELECTRICAL CHARACTERISTICS (curves)



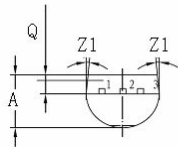
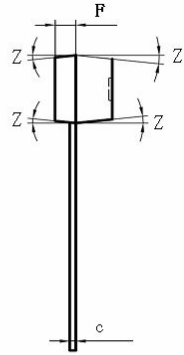
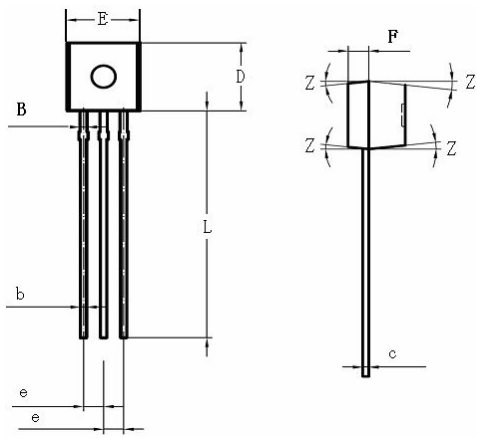


# 3DD4243D(T/I/M/Z)

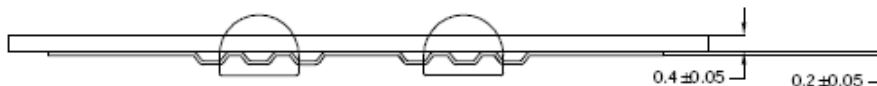
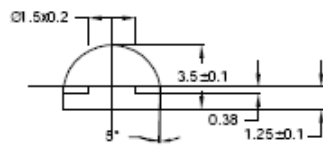
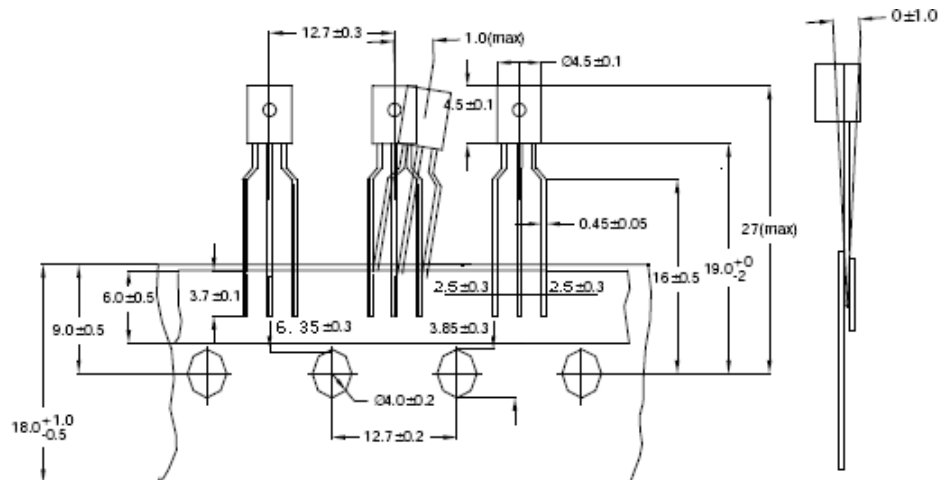
## 外形尺寸 PACKAGE MECHANICAL DATA

TO-92

单位 Unit : mm



A	3.30-3.90
B	0.35-0.55
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
F	1.00-1.60
L	12.50-15.50
Q	1.00-1.60
Z	2°
Z1	5°



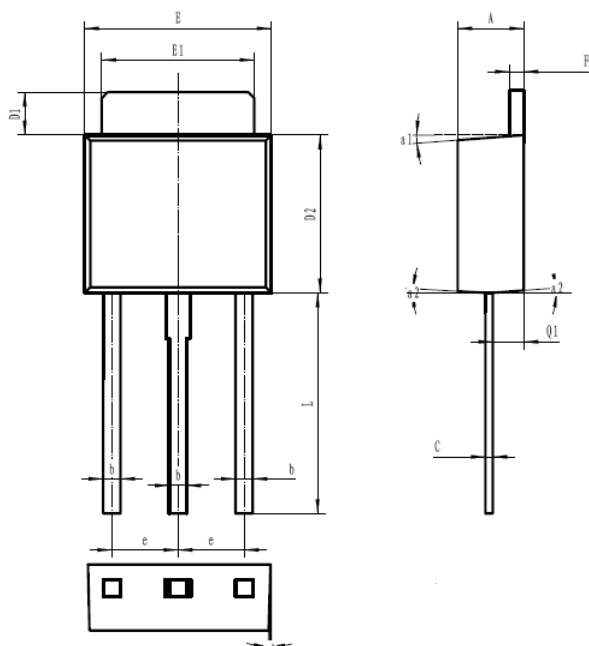


# 3DD4243D(T/I/M/Z)

## 外形尺寸 PACKAGE MECHANICAL DATA

### TO-251

单位 Unit : mm

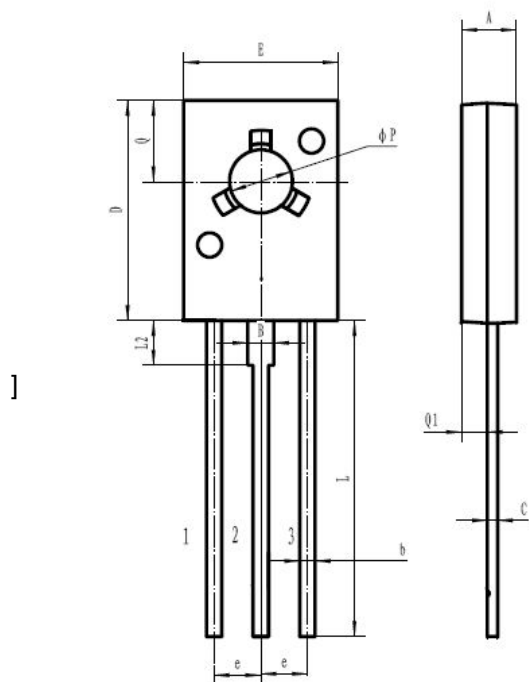


<b>A</b>	2.20-2.40
<b>b</b>	0.55-0.65
<b>b1</b>	0.70-0.90
<b>C</b>	0.45-0.55
<b>D1</b>	1.40-1.60
<b>D2</b>	5.40-5.60
<b>E</b>	6.40-6.60
<b>E1</b>	5.20-5.40
<b>e</b>	2.25-2.35
<b>F</b>	0.45-0.55
<b>L</b>	7.60-7.80
<b>Q1</b>	1.15-1.25
<b>a1</b>	4° -6°
<b>a2</b>	4° -6°
<b>a3</b>	4° -6°

## 外形尺寸 PACKAGE MECHANICAL DATA

### TO-126

单位 Unit : mm



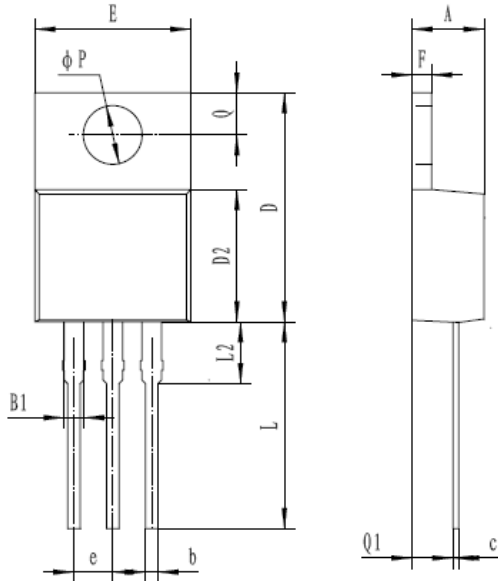
<b>A</b>	2.50-2.90
<b>B</b>	1.22-1.28
<b>c</b>	0.30-0.70
<b>D</b>	10.50-11.10
<b>E</b>	7.10-8.10
<b>Q</b>	3.80-4.20
<b>Q1</b>	1.07-1.47
<b>L</b>	2.10-2.30
<b>b</b>	0.60-0.90
<b>e</b>	2.19-2.39





外形尺寸 PACKAGE MECHANICAL DATA  
TO-220

单位 Unit : mm



符号	尺寸 (mm)
A	4.4-4.8
B1	1.1-1.4
b	0.7-0.95
c	0.3-0.55
D	14.45-16.0
D2	8.2-9.2
E	9.6-10.4
e	2.54 (typ)
F	1.2-1.35
L	13.05-14.05
L2	3.7-3.9
P	3.5-4.0
Q	2.4-3.0
Q1	2.2-2.9



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3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
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**附录 (Appendix) : 修订记录 (Revision History)**

日期 Date	旧版本 Last Rev.	新版本 New Rev.	修订内容 Description of Changes
2010-3-30		201003A	

