



# 3DD5024P

## 主要参数 MAIN CHARACTERISTICS

$BV_{CBO}$	1500 V
$I_C$	8A
$V_{CE(sat)}$	3V(max)
$t_f$	1 $\mu$ s(max)

### 用途

- 彩色电视机行输出电路

### APPLICATIONS

- Horizontal deflection output for color TV.

### 产品特性

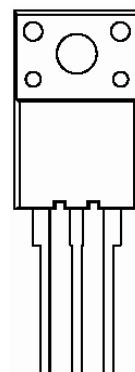
- 3DD5023P 是NPN 双极型高反压大功率晶体管，制造中采用的主要工艺技术有：高压平面工艺技术、三重扩散技术等，采用塑料全封装结构。环保（RoHS）产品。

### FEATURES

- 3DD5023P is high breakdown voltage of NPN bipolar transistor. The main process of manufacture: high voltage planar process, triple diffused process etc., adoption of fully plastic package. RoHS product.

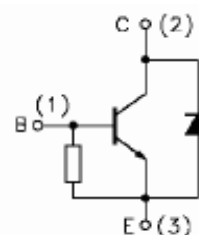
## 封装 Package

TO-220HF



1 2 3

## 等效电路 EQUIVALENT CIRCUIT



$R_{BE}=50\Omega(\text{Typ.})$

## 订货信息 ORDER MESSAGE

订货型号 Order codes		印 记 Marking	封 装 Package
有卤-条管	有卤-条管		
Halogen-Tube	Halogen-Free-Tube	5024P	TO-220HF
3DD5024P-FA-B	3DD5024P-FA-B		



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—基极直流电压 Collector-Base Voltage	BV <sub>CBO</sub>	1500	V
集电极—发射极直流电压 Collector-Emitter Voltage	BV <sub>CEO</sub>	600	V
发射极—基极直流电压 Emitter-Base Voltage	BV <sub>EBO</sub>	6	V
最大集电极电流 Collector Current	直流 DC	I <sub>C</sub>	A
	脉冲 Pulse	I <sub>CP</sub>	
最大基极直流电流 Base Current	I <sub>B</sub>	4	A
最大集电极耗散功率 Collector Power Dissipation	P <sub>C</sub>	35	W
最高结温 Max. Junction Temperature	T <sub>j</sub>	150	°C
储存温度 Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

电特性 **ELECTRICAL CHARACTERISTICS (Tc=25°C)**

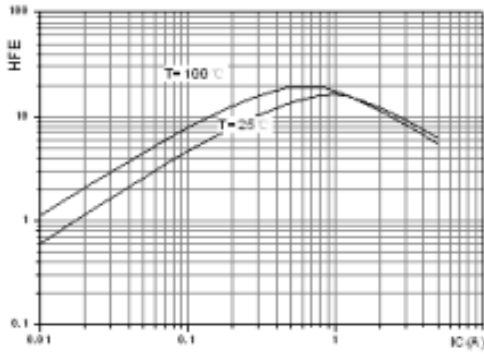
项 目 Parameter	测试条件 Tests conditions	最小值 Min	最大值 Max	单位 Unit
V(BR) <sub>CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	1500		V
V(BR) <sub>EBO</sub>	I <sub>E</sub> =400mA, I <sub>C</sub> =0	6		V
I <sub>CBO</sub>	V <sub>CB</sub> =1500V, I <sub>E</sub> =0		1	mA
I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0	40	150	mA
H <sub>FE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 1 A	10	30	
	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 4 A	5		
V <sub>CE(sat)</sub>	I <sub>C</sub> =4.5A, I <sub>B</sub> =0.9A		3	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =4.5A, I <sub>B</sub> =0.9A		1.5	V
-V <sub>F</sub>	I <sub>F</sub> =5A		2	V
t <sub>f</sub>	I <sub>C</sub> =4A, 2I <sub>B1</sub> =-I <sub>B2</sub> =1.8A		1	μs
t <sub>s</sub>	f <sub>H</sub> =15.75kHz		9	μs
f <sub>t</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1A	1.7		MHz



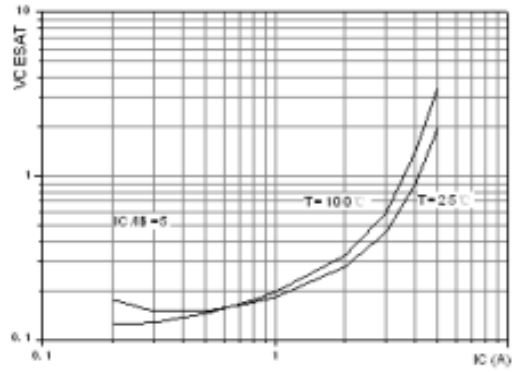


# 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

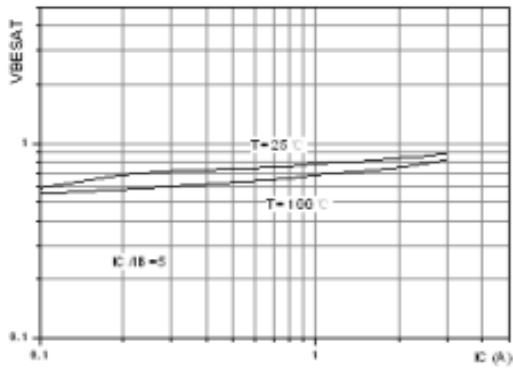
### HFE - IC



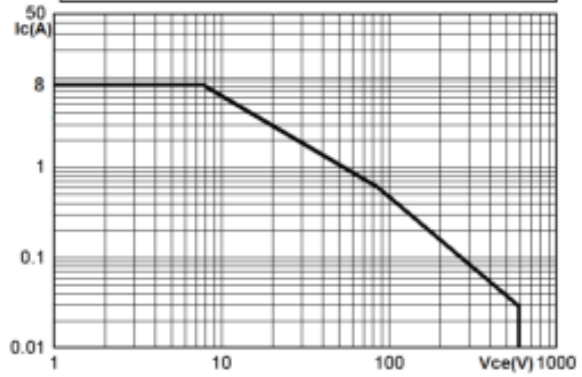
### VCE (sat) - IC



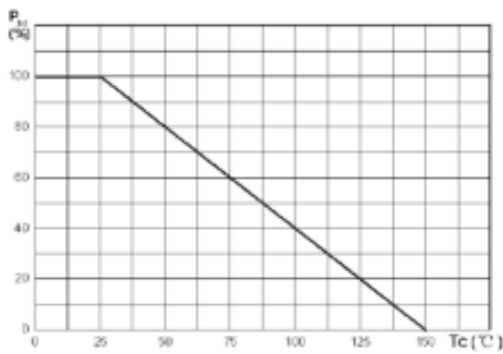
### VBE (sat) - IC



### SOA

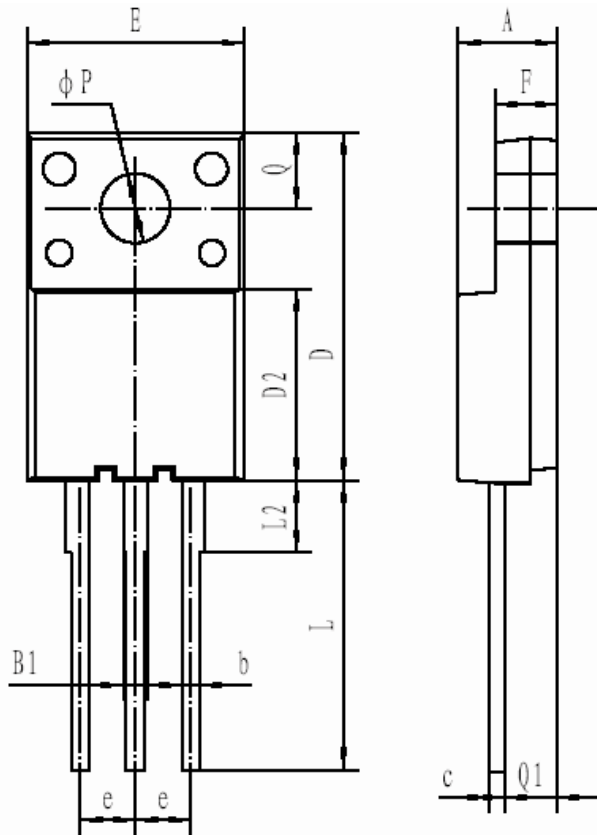


### PC-TC

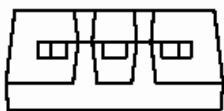


外形尺寸 PACKAGE MECHANICAL DATA  
TO-220HF

单位Unit : mm



符号 Symbol	Min	Max
A	4.0	5.0
B1	0.87	1.27
b	0.72	0.92
c	0.5	0.70
D	15.0	16.5
D2	7.8	9.4
E	9.62	10.62
e	2.54(typ)	
F	2.3	3.3
L	12.0	14.0
L2	3.1	3.5
$\phi P$	3.0	3.4
Q	3.15	3.55
Q1	2.2	2.5



**注意事项**

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- 3.在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
- 4.本说明书如有版本变更不另外告知

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