



3DD13005D

主要参数 MAIN CHARACTERISTICS

I_C	4A
V_{CEO}	400V
$P_C(TO-126/IPAK/IPAK-S3)$	40W
$P_C(TO-220/TO-220-S1)$	75W

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

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

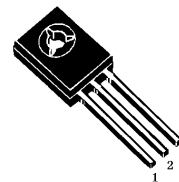
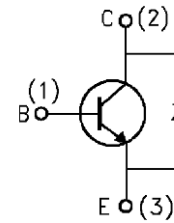
产品特性

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

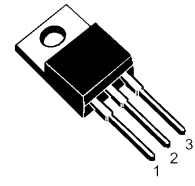
FEATURES

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

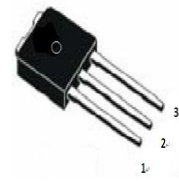
封装 Package



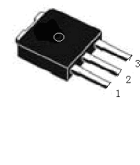
TO-126



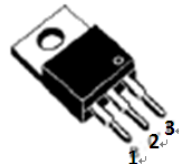
TO-220



IPAK



IPAK-S3



TO-220-S1

订货信息 ORDER MESSAGE

订货型号 Order codes				印记 Marking	封装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen-Free-Tube	有卤-袋装 Halogen-Bag	无卤-袋装 Halogen-Free-Bag		
3DD13005D-V-B	3DD13005D-V-BR	3DD13005D-V-C	3DD13005D-V-CR	13005D	IPAK
3DD13005D-V3-B	3DD13005D-V3-BR	3DD13005D-V3-C	3DD13005D-V3-CR	13005D	IPAK-S3
3DD13005D-M-B	3DD13005D-M-BR	3DD13005D-M-C	3DD13005D-M-CR	13005D	TO-126
3DD13005D-C-B	3DD13005D-C-BR	3DD13005D-C-C	3DD13005D-C-CR	13005D	TO-220C
3DD13005D-C1-B	3DD13005D-C1-BR	3DD13005D-C1-C	3DD13005D-C1-CR	13005D	TO-220C-S1





绝对最大额定值 ABSOLUTE RATINGS (Tc=25°C)

项 目	符 号	数 值	单 位
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	4	A
最大集电极脉冲电流 Collector Current (pulse)	I _{CP}	8	A
最大基极直流电流 Base Current (DC)	I _B	2	A
最大基极脉冲电流 Base Current (pulse)	I _{BP}	4	A
最大集电极耗散功率 Total Dissipation (TO-126)	P _C	40	W
最大集电极耗散功率 Total Dissipation (IPAK/ IPAK-S3)	P _C	40	W
最大集电极耗散功率 Total Dissipation (TO-220/TO-220-S1)	P _C	75	W
最高结温 Junction Temperature	T _j	150	°C
贮存温度 Storage Temperature	T _{stg}	-55~+150	°C

注：pulse电流宽度为小于5ms的非重复单脉冲。 Pulse Test: Pulse Width = 5.0 ms, Duty Cycle < 10%.

电特性 ELECTRICAL CHARACTERISTIC

项 目	测试条件	最小值	典型值	最大值	单位
V(BR) _{CEO}	I _C =10mA, I _B =0	400	-	-	V
V(BR) _{CB0}	I _C =1mA, I _B =0	700	-	-	V
V(BR) _{EBO}	I _E =1mA, I _C =0	9	-	-	V
I _{CB0}	V _{CB} =700V, I _E =0	-	-	100	μA
I _{CEO}	V _{CE} =400V, I _B =0	-	-	50	μA
I _{EBO}	V _{EB} =9V, I _C =0	-	-	10	μA
Hfe(1)	V _{CE} =5V, I _C =500mA	10	-	30	
Hfe(2)	V _{CE} =5V, I _C =2A	5	-	-	
V _{CE(sat)} (1)	I _C =1A, I _B =0.2A	-	-	1.5	V
V _{CE(sat)} (2)	I _C =3A, I _B =1A	-	-	1.5	V
V _{BE(sat)}	I _C =2A, I _B =0.5A	-	-	1.6	V
t _s	I _C =0.5A	1.5	-	5.5	μS
f _T	V _{CE} =10V, I _C =0.5A	4	-	-	MHz

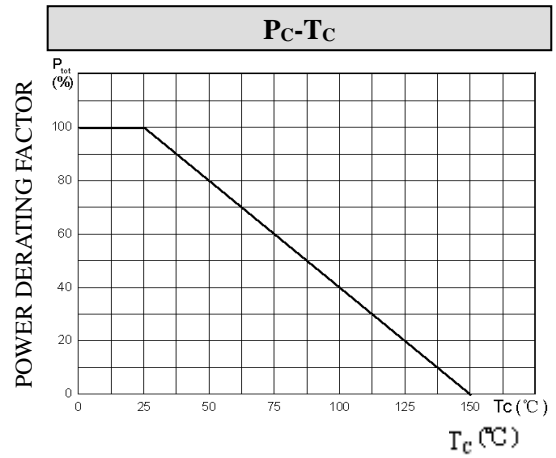
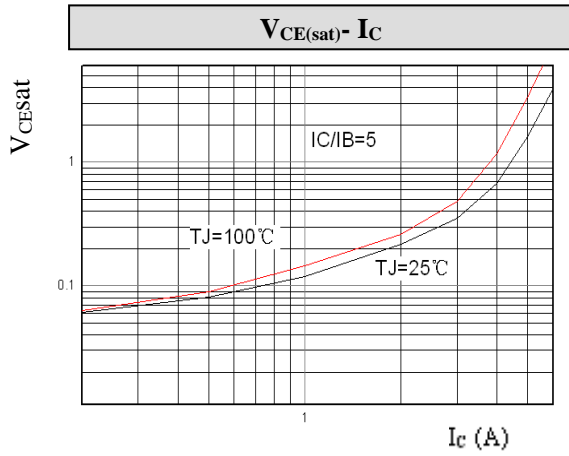
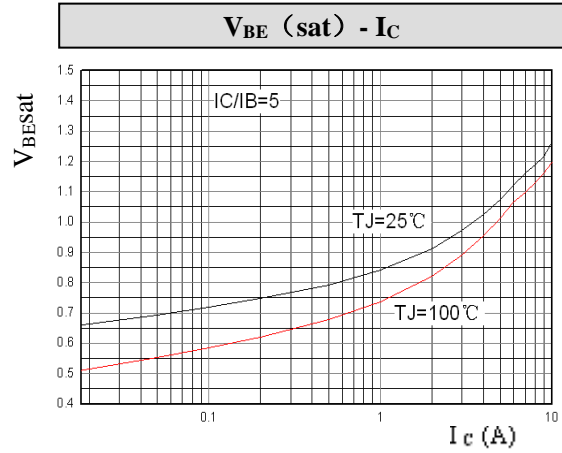
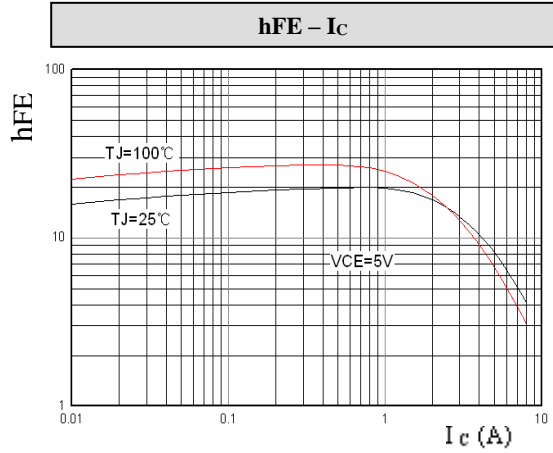
热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 TO-126 Thermal Resistance Junction Case TO-126	R _{th(j-c)}	-	3.125	°C/W
结到管壳的热阻 IPAK/IPAK-S3 Thermal Resistance Junction Case IPAK/ IPAK-S3	R _{th(j-c)}	-	3.125	°C/W
结到管壳的热阻 TO-220 Thermal Resistance Junction Case TO-220	R _{th(j-c)}	-	1.67	°C/W
结到管壳的热阻 TO-220-S1 Thermal Resistance Junction Case TO-220-S1	R _{th(j-c)}	-	1.67	°C/W



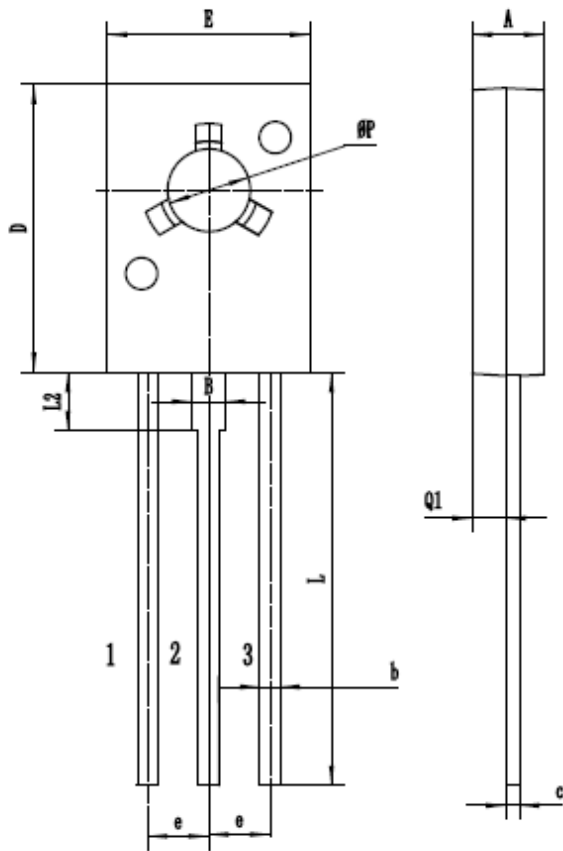


特征曲线 ELECTRICAL CHARACTERISTICS (curves)



外形尺寸 PACKAGE MECHANICAL DATA
TO-126

单位 Unit : mm



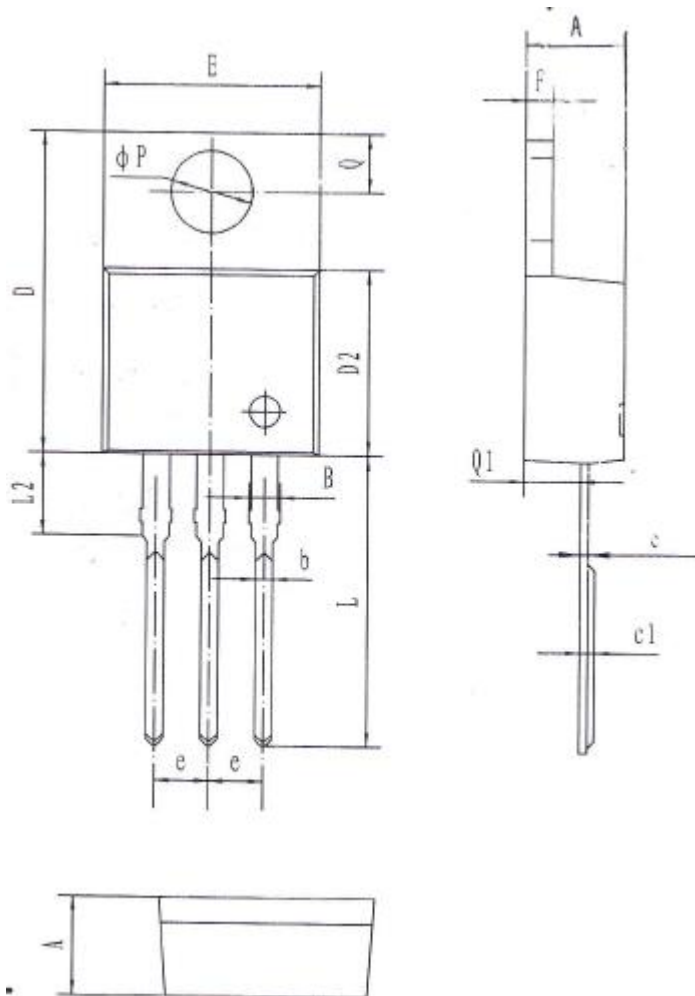
符号 symbol	MIN	MAX
A	2.5	2.9
B	1.22	1.47
b	0.6	0.9
c	0.3	0.7
D	10.5	11.1
E	7.1	8.1
e	2.19	2.39
L	15.3	15.7
L2	2.05	2.35
Q1	1.07	1.47
P	2.95	3.25





外形尺寸 PACKAGE MECHANICAL DATA
TO-220

单位 Unit : mm



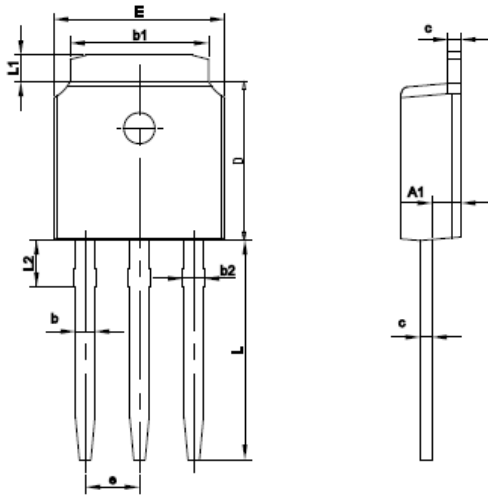
符号 symbol	MIN	MAX
A	4.40	4.80
B	1.10	1.40
b	0.70	0.95
c	0.28	0.48
c1	0.32	0.52
D	14.45	16.00
D2	8.20	9.20
E	9.60	10.40
e	2.39	2.69
F	1.20	1.35
L	13.05	14.05
L2	3.70	3.90
Q	2.40	3.00
Q1	2.20	2.90
P	3.50	4.00



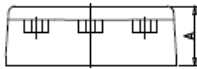


外形尺寸 PACKAGE MECHANICAL DATA
IPAK

单位 Unit : mm



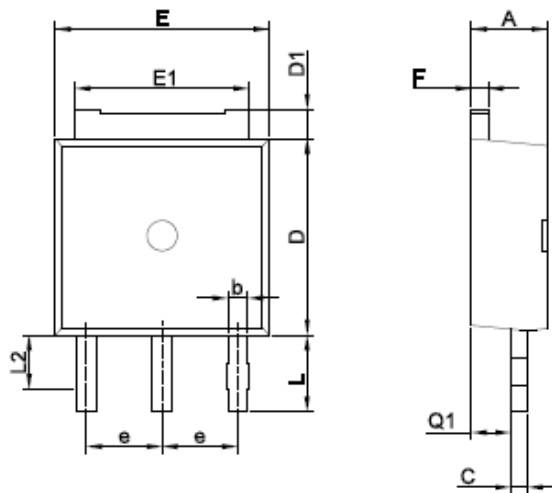
SYMBOL	MM	
	MIN	MAX
A	2.10	2.50
A1	0.87	1.27
b	0.63	0.93
b1	5.13	5.53
b2	0.67	1.00
c	0.40	0.60
D	5.80	6.40
E	6.30	6.90
L	9.10	9.70
e	2.286BSC	
L1	0.82	1.22
L2	0.90	1.20



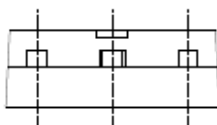
外形尺寸 PACKAGE MECHANICAL DATA

单位 Unit : mm

IPAK-S3



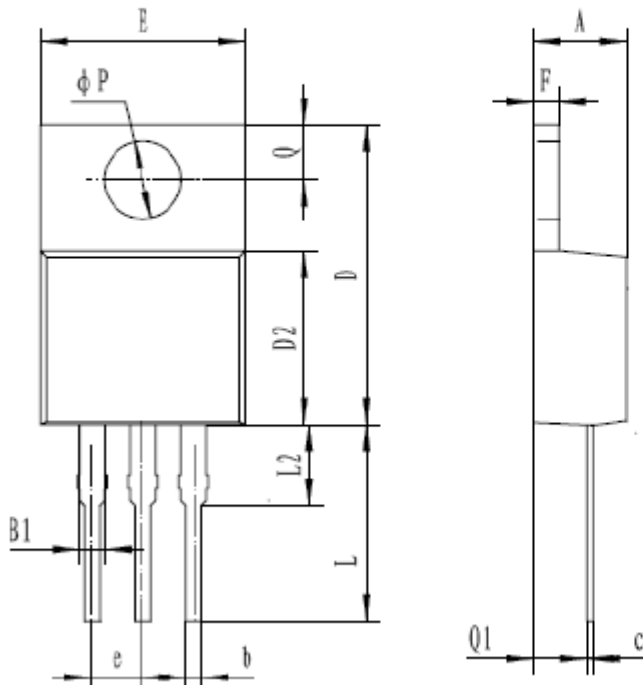
符号 symbol	MIN	MAX
A	2.20	2.40
b	0.70	0.90
c	0.45	0.55
D	6.00	6.30
D1	0.80	1.20
E	6.50	6.80
E1	5.20	5.50
e	2.28TYP	
F	0.45	0.55
L	2.30	2.70
L2	0.90	1.20
Q1	0.80	1.20





外形尺寸 PACKAGE MECHANICAL DATA
TO-220-S1

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	6.96-8.16
L2	3.7-3.9
P	3.5-4.0
Q	2.4-3.0
Q1	2.2-2.9



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