



3DD4613H

主要参数 MAIN CHARACTERISTICS

I_C	1.5A
V_{CEO}	500V
V_{CES}	900V
$P_C(TO-92-FJ/92-FJ-F1)$	1W
$P_C(TO-126/IPAK)$	20W
$P_C(DPAK)$	20W

用途

- 充电器
- 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

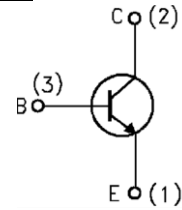
APPLICATIONS

- Battery charger
- 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



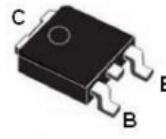
TO-92-FJ



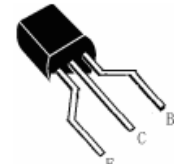
IPAK



DPAK



TO-92-FJ-F1



TO-126



订货信息 ORDER MESSAGE

订货型号 Order codes				印 记 Marking	封 装 Package
有卤-编带	无卤-编带	有卤-袋装	无卤-袋装		
Halogen-Reel	Halogen-Free-Reel	Halogen-Bag	Halogen-Free-Bag		
3DD4613H-TJ-A	3DD4613H-TJ-AR	3DD4613H-TJ-C	3DD4613H-TJ-CR	D4613H	TO-92-FJ
3DD4613H-TJ1-A	3DD4613H-TJ1-AR	3DD4613H-TJ1-C	3DD4613H-TJ1-CR	D4613H	TO-92-FJ-F1
N/A	N/A	3DD4613H-M-C	3DD4613H-M-CR	D4613H	TO-126
3DD4613H-R-A	3DD4613H-R-AR	3DD4613H-R-C	3DD4613H-R-CR	D4613H	DPAK
N/A	N/A	3DD4613H-V-C	3DD4613H-V-CR	D4613H	IPAK
有卤-条管	无卤-条管			印 记 Marking	封 装 Package
Halogen-Tube	Halogen-Free-Tube				
3DD4613H-V-B	3DD4613H-V-BR			D4613H	IPAK
3DD4613H-M-B	3DD4613H-M-BR			D4613H	TO-126



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}	900	V
集电极—发射极直流电压 Collector- Emitter Voltage ($I_B=0$)	V_{CEO}	500	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	1.5	A
最大集电极脉冲电流 Collector Current (pulse)	I_{CP}	3.0	A
最大集电极耗散功率 Total Dissipation (TO-92-FJ/92-FJ-F1)	P_C	1	W
最大集电极耗散功率 Total Dissipation (IPAK/DPAK/126-K1)	P_C	20	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
$V(BR)_{CEO}$	$I_C=10\text{mA}, I_B=0$	500	560	-	V
$V(BR)_{CBO}$	$I_C=1\text{mA}, I_E=0$	900	1000	-	V
$V(BR)_{EBO}$	$I_E=1\text{mA}, I_C=0$	9	14	-	V
I_{CBO}	$V_{CB}=900\text{V}, I_E=0$	-	-	1	μA
I_{CEO}	$V_{CE}=500\text{V}, I_B=0$	-	-	10	μA
I_{EBO}	$V_{EB}=7\text{V}, I_C=0$	-	-	0.5	μA
Hfe	$V_{CE}=5\text{V}, I_C=10\text{mA}$	20	26	-	-
	$V_{CE}=5\text{V}, I_C=0.2\text{A}$	20	30	40	-
	$V_{CE}=5\text{V}, I_C=1.0\text{A}$	5	8	20	-
$V_{CE(sat)}$	$I_C=1.0\text{A}, I_B=0.25\text{A}$	-	0.7	1.5	V
	$I_C=0.5\text{A}, I_B=0.1\text{A}$	-	0.3	0.8	V
$V_{BE(sat)}$	$I_C=1.0\text{A}, I_B=250\text{Ma}$	-	1.0	1.5	V
tf	$V_{CC}=125\text{V}, I_C=0.1\text{A},$	-	-	1.0	μs
ts	$I_{B1}=-I_{B2}=0.02\text{A}$	-	-	10	us
Ft	$V_{CE}=10\text{V}, I_C=0.1\text{A}$	4	-	-	MHz

热特性 THERMAL CHARACTERISTIC

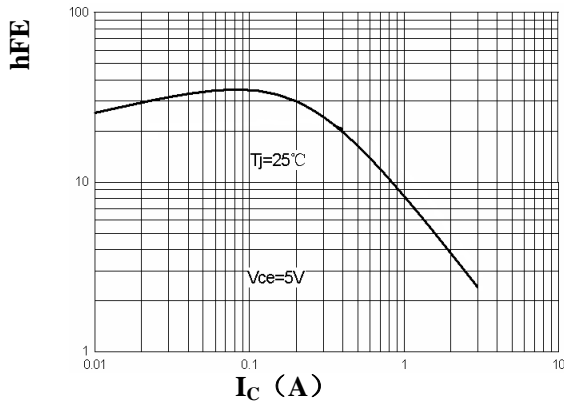
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal Resistance Junction Ambient TO-92-FJ/92-FJ-F1	$R_{th(j-a)}$	-	125	$^\circ\text{C/W}$
结到管壳的热阻 Thermal Resistance Junction Case IPAK/TO-126	$R_{th(j-c)}$	-	12.5	$^\circ\text{C/W}$
结到管壳的热阻 Thermal Resistance Junction Case DPAK	$R_{th(j-c)}$	-	6.25	$^\circ\text{C/W}$



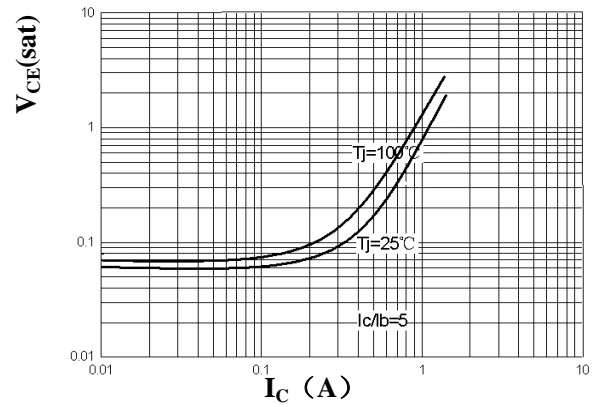


特征曲线 ELECTRICAL CHARACTERISTICS (curves)

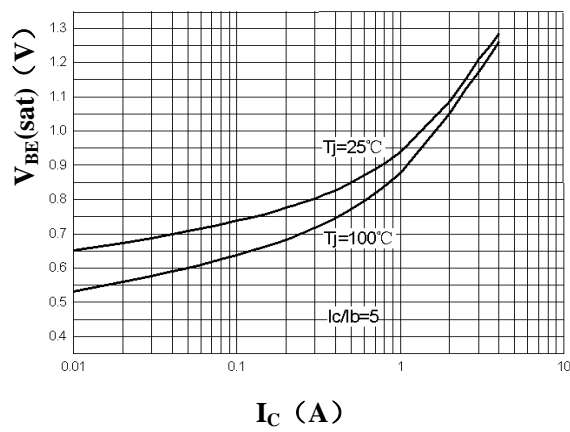
hFE - I_C



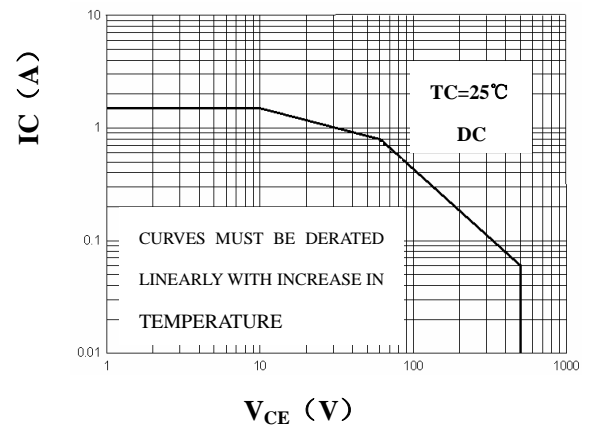
V_{CE(sat)} - I_C



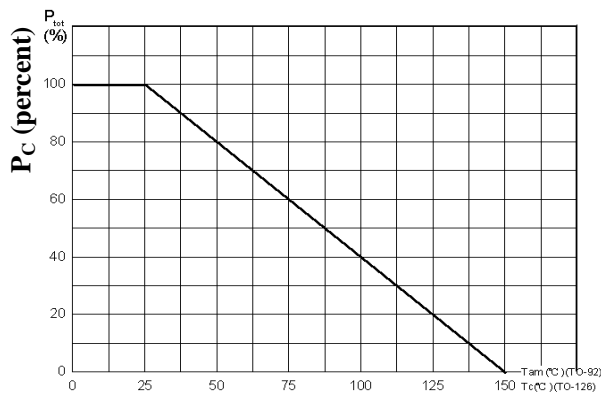
V_{BE (sat)} - I_C



SOA



P_C-T_C

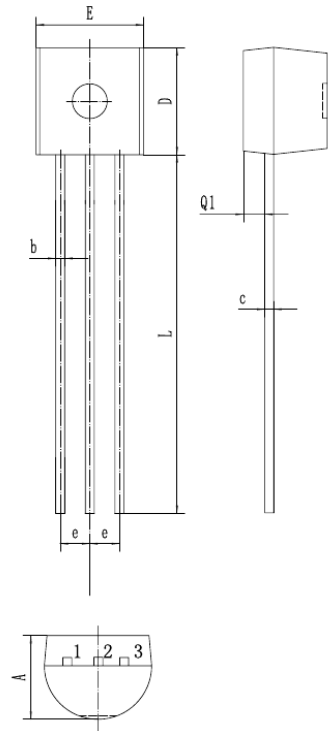




外形尺寸 PACKAGE MECHANICAL DATA

TO-92-FJ

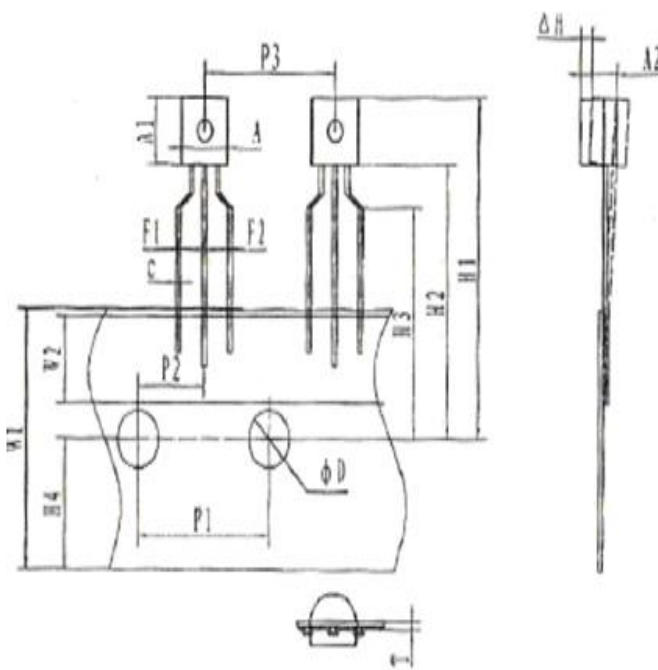
单位 Unit : mm



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

TO-92-FJ(编带)

单位 Unit : mm



符号 Symbol	尺寸 (mm) Size (mm)
A	4.5-4.7
A1	4.5-4.7
A2	3.5-3.7
c	TYP 0.45
F1/F2	2.2-2.8
W1	17.5-18.5
W2	5.5-6.5
H1	22.0-27.0
H2	18.0-20.0
H3	15.0-17.0
H4	8.5-9.5
P1	12.5-12.9
P2	6.0-6.7
P3	12.5-12.9
T	0.40-0.45
ΦD	3.8-4.2
ΔH	0-1.0

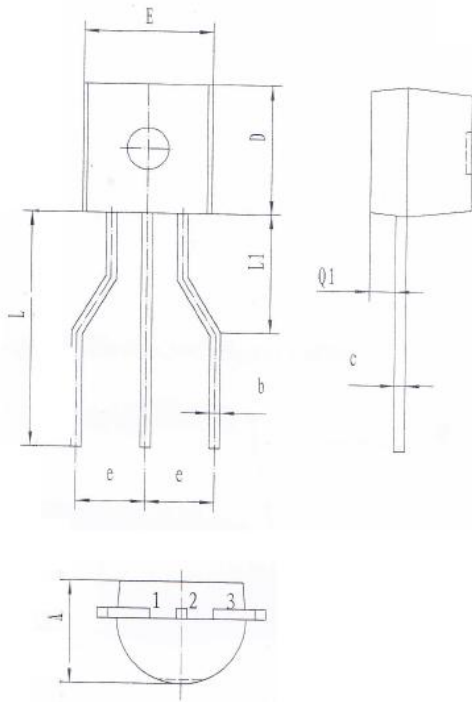




外形尺寸 PACKAGE MECHANICAL DATA

TO-92-FJ-F1

单位 Unit : mm

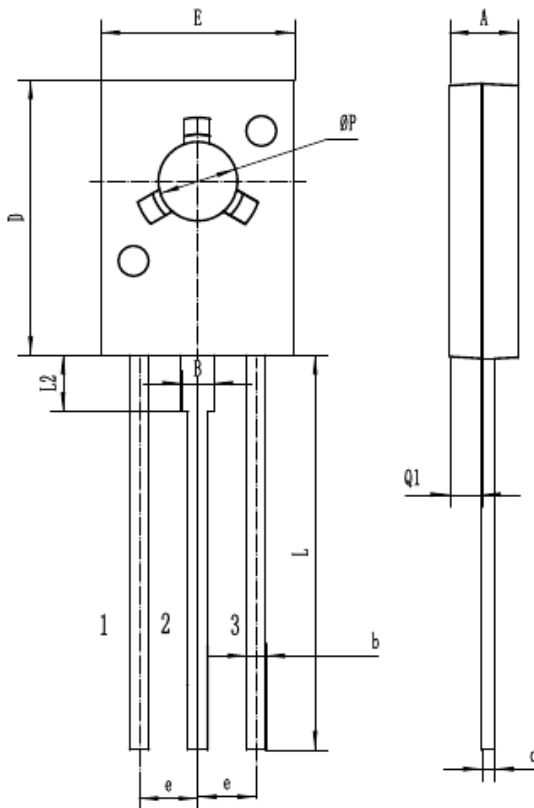


符号 Symbol	尺寸 (mm) Size (mm)
A	3.30-3.90
b	0.35-0.55
c	0.31-0.51
D	4.30-4.90
E	4.30-4.90
e	2.00-3.10
L	5.90-7.10
L1	2.70-3.30
Q1	0.85-0.99

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

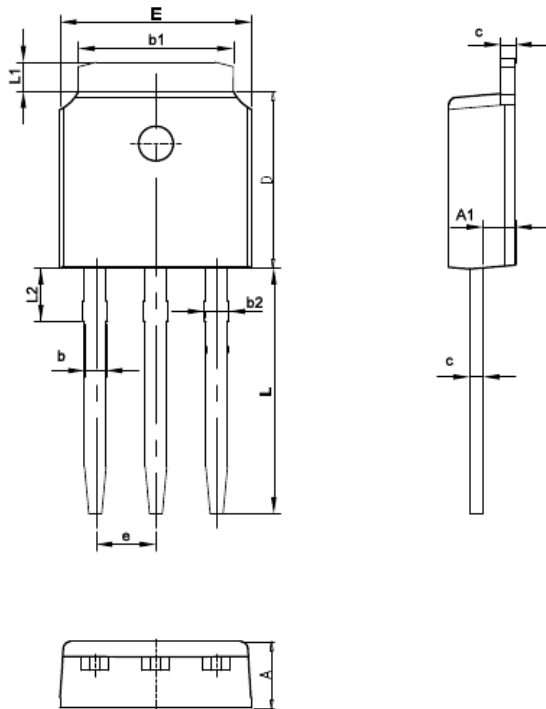




外形尺寸 PACKAGE MECHANICAL DATA

IPAK

单位 Unit : mm

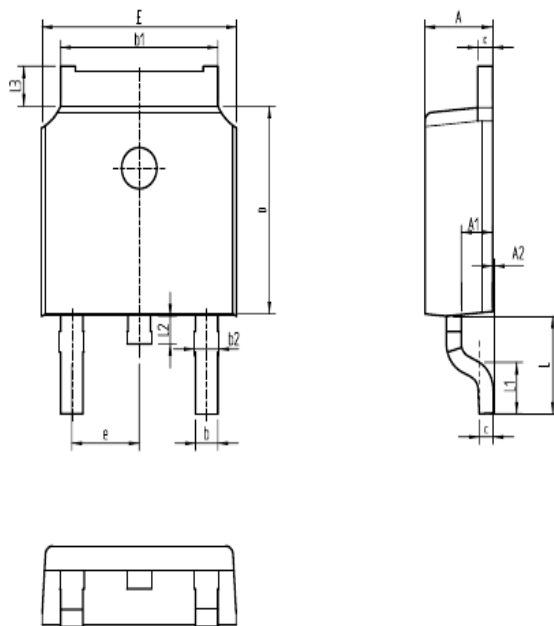


SYMBOL	MM	
	MIN	MAX
A	2.10	2.50
A1	0.87	1.27
b	0.63	0.93
b1	5.13	5.53
b2	0.67	1.00
c	0.40	0.60
D	5.80	6.40
E	6.30	6.90
L	9.10	9.70
e	2.286BSC	
L1	0.82	1.22
L2	0.90	1.20

外形尺寸 PACKAGE MECHANICAL DATA

DPAK

单位 Unit : mm



SYMBOL	mm	
	MIN	MAX
A	2.16	2.41
A1	0.97	1.17
A2	0.00	0.15
b	0.63	0.93
b1	5.13	5.53
b2	0.66	0.96
c	0.40	0.60
D	5.80	6.40
E	6.30	6.90
e	2.286BSC	
L	2.50	3.30
L1	1.20	1.80
L2	0.60	1.00
L3	0.85	1.30



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