



# 3DD4617H

## 主要参数 MAIN CHARACTERISTICS

$I_C$	4.0A
$V_{CEO}$	450V
$P_C$ (TO-126P/TO-251)	30W
$P_C$ (DPAK/252/220HF)	40W
$P_C$ (TO-220/TO-220C)	70W

### 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

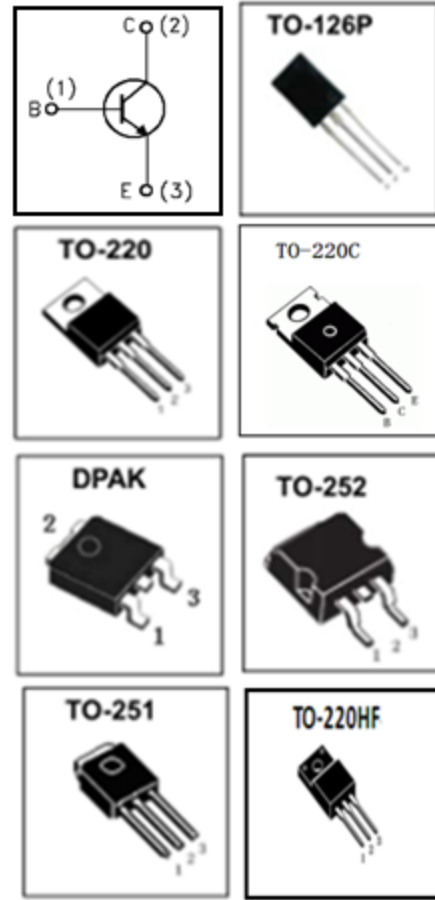
### APPLICATIONS

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

### FEATURES

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

## 封装 Package



## 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		
3DD4617H-R-A	3DD4617H-R-AR	3DD4617H-R-C	3DD4617H-R-CR	4617H	DPAK
3DD4617H-U-A	3DD4617H-U-AR	3DD4617H-U-C	3DD4617H-U-CR	4617H	TO-252
N/A	N/A	3DD4617H-MP-C	3DD4617H-MP-CR	4617H	TO-126P
N/A	N/A	3DD4617H-VB-C	3DD4617H-VB-CR	4617H	TO-251
N/A	N/A	3DD4617H-CA-C	3DD4617H-CA-CR	4617H	TO-220
@N/A	N/A	3DD4617H-C-C	3DD4617H-C-CR	4617H	TO-220C
有卤-条管	无卤-条管			印 记 Markin	封 装 Package
Halogen-Tube	Halogen-Free-Tube				
3DD4617H-MP-B	3DD4617H-MP-BR			4617H	TO-126P
3DD4617H-VB-B	3DD4617H-VB-BR			4617H	TO-251
3DD4617H-CA-B	3DD4617H-CA-BR			4617H	TO-220





@3DD4617H-C-B	3DD4617H-C-BR		4617H	TO-220
3DD4617H-FA-B	3DD4617H-FA-BR		4617H	TO-220HF

## 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 <sub>BE</sub> =0)	V <sub>CES</sub>	800	V
集电极—发射极直流电压 Collector- Emitter Voltage (I <sub>B</sub> =0)	V <sub>CEO</sub>	450	V
发射极—基极直流电压 Emitter-Base Voltage	V <sub>EBO</sub>	9	V
最大集电极直流电流 Collector Current (DC)	I <sub>C</sub>	4.0	A
最大集电极脉冲电流 Collector Current (pulse)	I <sub>CP</sub>	8	A
最大集电极耗散功率 Total Dissipation (TO-126P/251)	P <sub>C</sub>	30	W
最大集电极耗散功率 Total Dissipation (TO-252/DPAK/220HF)	P <sub>C</sub>	40	W
最大集电极耗散功率 Total Dissipation (TO-220/TO-220C)	P <sub>C</sub>	75	W
最高结温 Junction Temperature	T <sub>j</sub>	150	°C
贮存温度 Storage Temperature	T <sub>stg</sub>	-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) <sub>CEO</sub>	I <sub>C</sub> =5mA, I <sub>B</sub> =0	450	500	-	V
V(BR) <sub>CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	800	900	-	V
V(BR) <sub>EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	9	14	-	V
I <sub>CBO</sub>	V <sub>CB</sub> =800V, I <sub>E</sub> =0	-	-	0.1	mA
I <sub>CEO</sub>	V <sub>CE</sub> =450V, I <sub>B</sub> =0	-	-	1	mA
I <sub>EBO</sub>	V <sub>EB</sub> =9V, I <sub>C</sub> =0	-	-	0.1	mA
hFE	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA	20	30	40	-
	V <sub>CE</sub> =5V, I <sub>C</sub> =4.0A	5.0	9.5	-	-
V <sub>CE(sat)</sub>	I <sub>C</sub> =4A, I <sub>B</sub> =0.8A	-	0.6	1.3	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =4A, I <sub>B</sub> =0.8A	-	1.1	1.5	V
Tf	V <sub>CC</sub> =24V I <sub>C</sub> =2A I <sub>B1</sub> =-I <sub>B2</sub> =0.4A	-	-	0.7	uS
fT	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	5	-	-	MHz

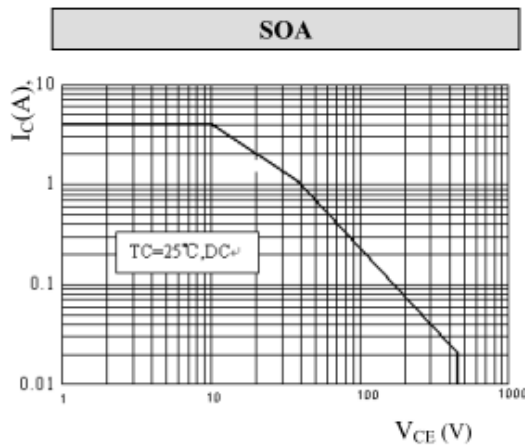
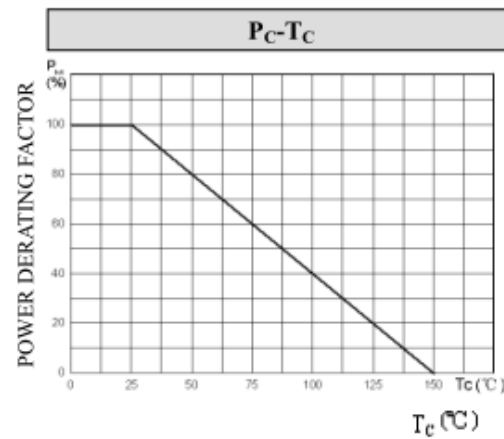
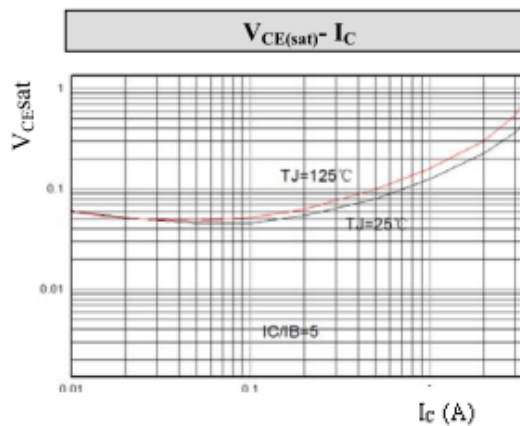
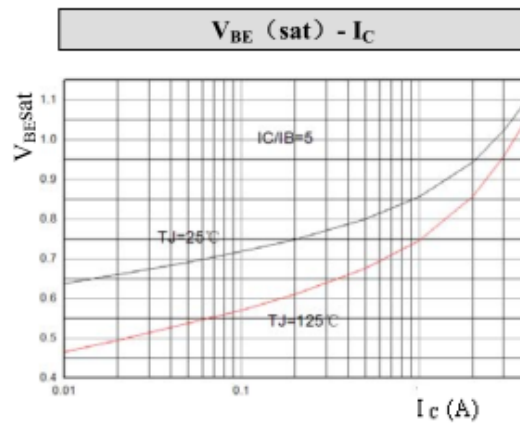
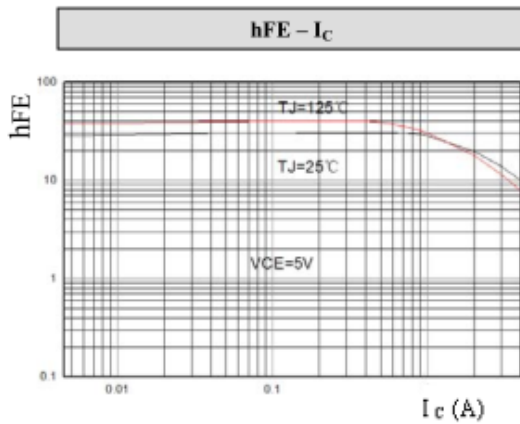
## 热特性 THERMAL CHARACTERISTIC

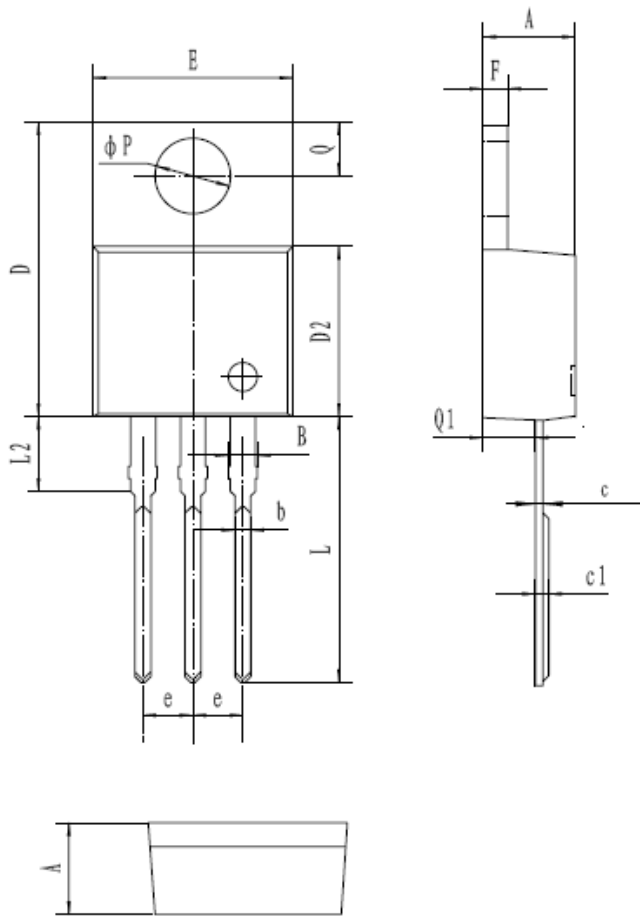
项 目 Parameter	符 号 Symbol	最小值 min	最大值 max	单 位 Unit
结到管壳的热阻 Thermal Resistance Junction Case TO-126P/251	R <sub>th(j-c)</sub>	-	4.167	°C/W
结到管壳的热阻 Thermal Resistance Junction Case 252/DPAK/220HF			3.125	°C/W
结到管壳的热阻 Thermal Resistance Junction Case TO-220/ TO-220C	R <sub>th(j-c)</sub>	-	1.670	°C/W





特征曲线 ELECTRICAL CHARACTERISTICS (curves)





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



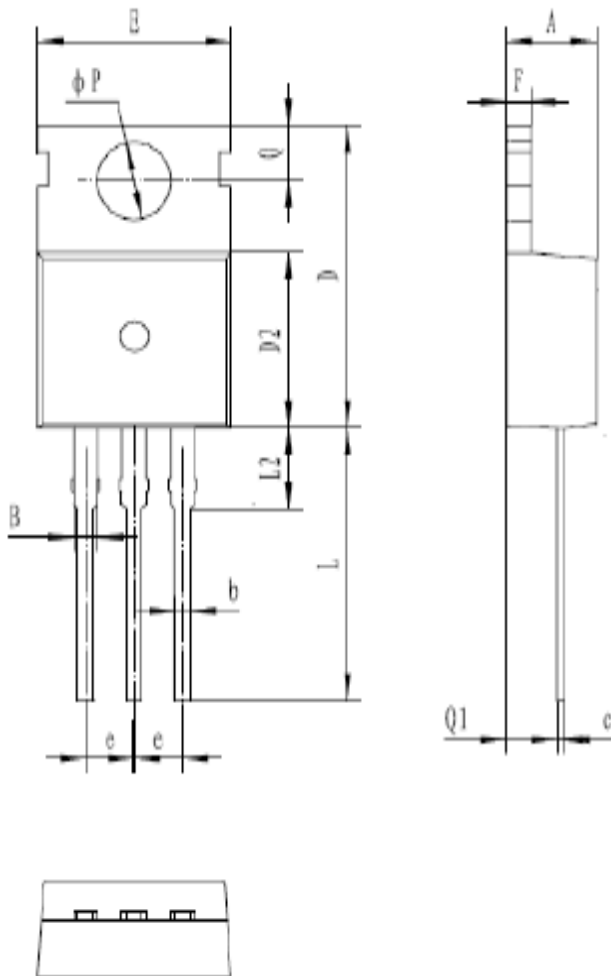


3DD4617H

外形尺寸 PACKAGE MECHANICAL DATA

TO-220C

单位 Unit : mm



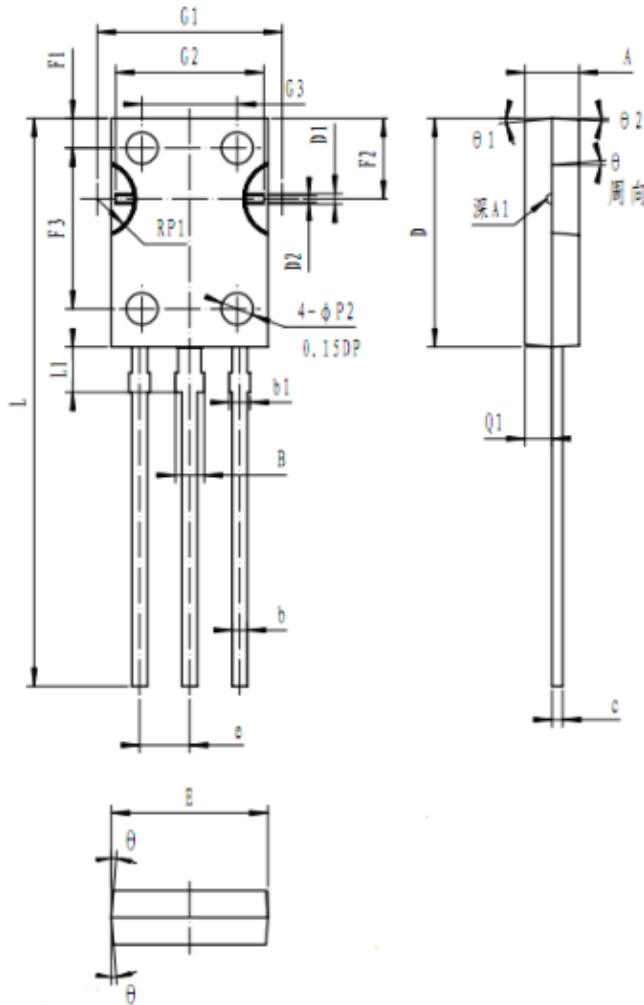
符号 symbol	MIN	MAX
A	4.30	4.70
B	1.10	1.40
b	0.70	0.95
c	0.40	0.65
D	15.20	16.20
D2	9.00	9.40
E	9.70	10.10
e	2.39	2.69
F	1.25	1.40
L	12.60	13.60
L2	2.80	3.20
Q	2.60	3.00
Q1	2.20	2.60
P	3.50	3.80





**TO-126P**

单位 Unit : mm



SYMBOL	MM		
	MIN	NOM	MAX
*A	2.45	2.55	C
A1	0.20	0.20	0.25
*b	0.71	0.76	0.81
b1	0.72	0.82	0.92
*B	1.27	1.37	1.45
*c	0.45	0.50	0.55
*D	10.70	10.80	10.90
D1		0.50	
D2		0.30	
*E	7.30	7.40	7.50
F1	1.30	1.40	1.50
F2	3.70	3.80	3.90
F3	7.50	7.60	7.70
G1	8.64	8.74	8.84
G2	6.90	7.00	7.10
G3	4.40	4.50	4.60
*e	2.24	2.29	2.34
*L	26.90	27.00	27.10
L1	2.10	2.20	2.30
Q1	1.17	1.27	1.37
theta		3°	
theta1		2°	
theta2		1°	
RP1		1.70	
phi P2	1.45	1.50	1.55

带\*为检验尺寸

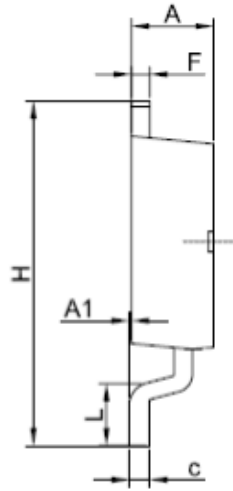
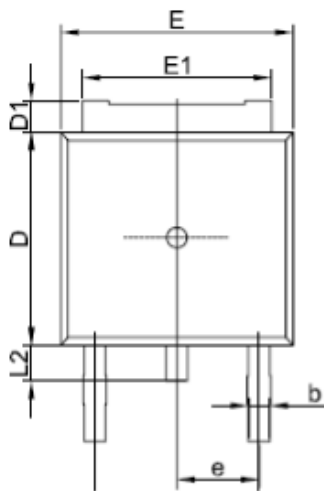




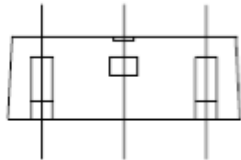
## 外形尺寸 PACKAGE MECHANICAL DATA

DPAK

单位 Unit : mm

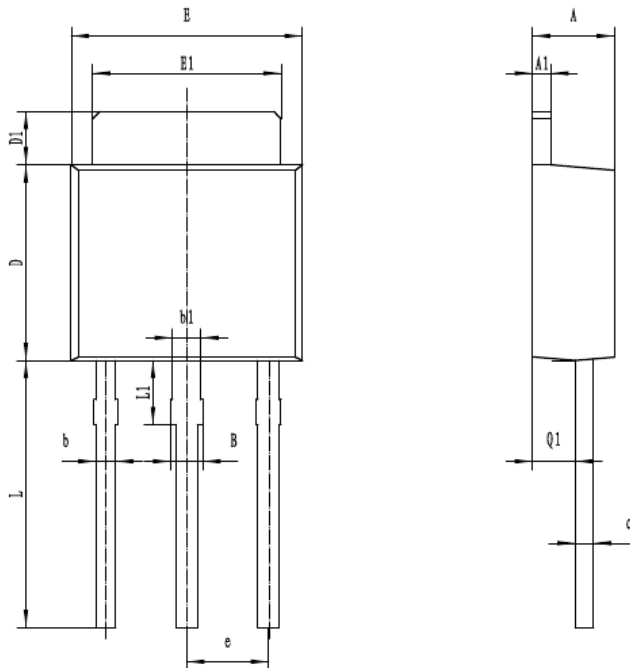


符号 symbol	MIN	MAX
A	2.2	2.4
A1	0.0	0.2
b	0.7	0.9
c	0.45	0.55
D	6.0	6.3
D1	0.8	1.2
E	6.5	6.8
E1	5.2	5.5
e	2.28TYP	
F	0.45	0.55
H	9.65	10.45
L	1.0	1.3
L2	0.7	1.3



外形尺寸 PACKAGE MECHANICAL DATA  
TO-251

单位 Unit : mm



SYMBOL	MM	
	MIN	MAX
A	2.10	2.50
A1	0.40	0.60
b	0.50	0.70
b1	0.70	0.90
B	0.75	1.05
c	0.40	0.60
D	5.30	5.90
D1	1.20	1.80
E	6.30	6.90
E1	5.10	5.50
e	2.14	2.44
L	7.30	8.10
L1	1.40	2.00
Q1	1.00	1.40

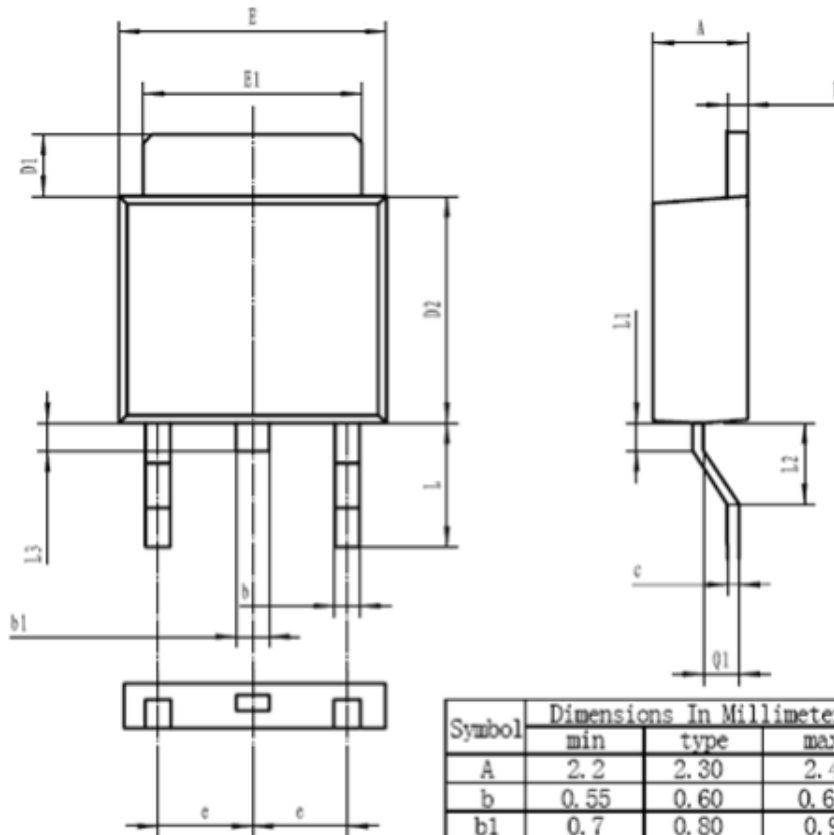






TO-252

单位 Unit : mm

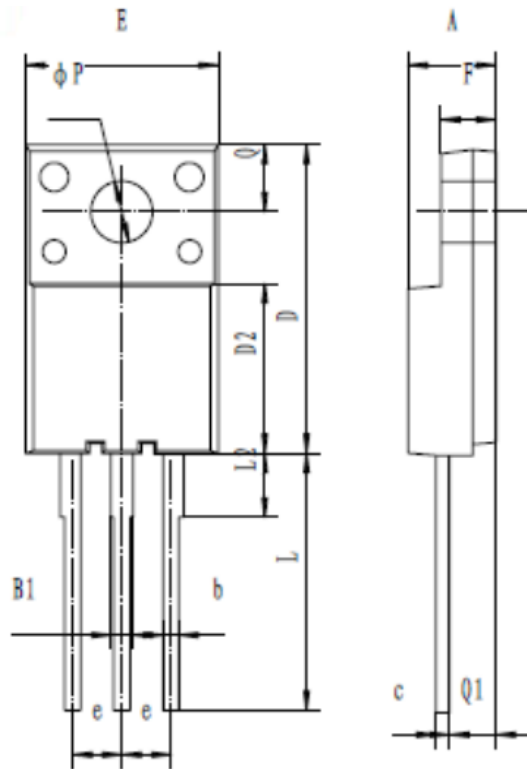


Symbol	Dimensions In Millimeters		
	min	type	max
A	2.2	2.30	2.4
b	0.55	0.60	0.65
b1	0.7	0.80	0.9
c	0.45	0.50	0.55
D1	1.4	1.50	1.6
D2	5.4	5.50	5.6
E	6.4	6.50	6.6
E1	5.2	5.30	5.4
e	2.25	2.30	2.35
F	0.45	0.50	0.55
L	2.6	2.70	2.8
L1	0.9	1.00	1.1
L2	1.7	1.8	1.9
L3	0.7	0.8	0.9
Q1	1.15	1.2	1.25

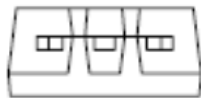


外形尺寸 PACKAGE MECHANICAL DATA  
TO-220HF

单位 Unit : mm



符号 symbol	MIN	MAX
A	4	5
B1	0.87	1.27
b	0.72	0.92
c	0.5	0.7
D	15	16.5
D2	7.8	9.4
E	9.62	10.62
e	2.54TYP	
F	2.3	3.3
L	13	14
L2	3.1	3.5
$\Phi P$	3	3.4
Q	3.15	3.55
Q1	2.2	2.5



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