BDW93C/BDW94C

用途

- 发动机点火
- 高频开关电源
- 高频功率变换
- 一般功率放大电路

APPLICATIONS

- Engine ignition
- High frequency switching power supply
- High frequency power transform
- ly power amplifier circuit

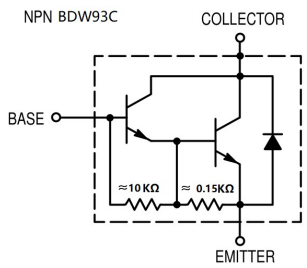
产品特性

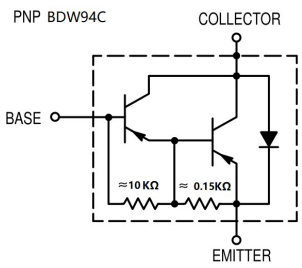
- 高电流容量
- 高可靠性
- 环保（RoHS）产品

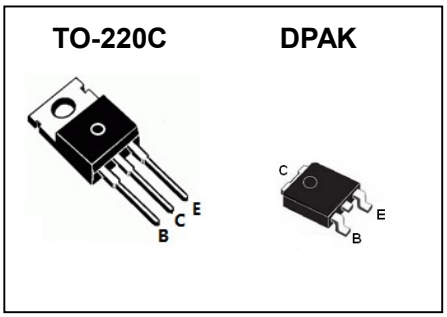
FEATURES

- High current capability
- 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-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube	有卤-袋装 Halogen-Reel	无卤-袋装 Halogen Free-Reel	有卤-编带 Halogen-Reel	无卤-编带 Halogen Free-Reel		
BDW93C-C-B	N/A	BDW93C-C-C	N/A	N/A	N/A	BDW93C	TO-220C
BDW94C-C-B	N/A	BDW94C-C-C	N/A	N/A	N/A	BDW94C	TO-220C
BDW93C-R-B	N/A	N/A	N/A	BDW93C-R-E	N/A	BDW93C	DPAK
BDW94C-R-B	N/A	N/A	N/A	BDW94C-R-E	N/A	BDW94C	DPAK

热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	最大值 Value(max)	单 位 Unit
结到管壳的热阻 TO-220C Thermal Resistance Junction Case TO-220C	Rth(j-c)	1.563	℃/W
结到管壳的热阻 DPAK Thermal Resistance Junction Case DPAK	Rth(j-c)	3.125	℃/W

绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

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}	100	V
集电极—发射极直流电压	Collector- Emitter Voltage（I_B=0）	V_{CEO}	100	V
发射极—基极直流电压	Emitter-Base Voltage	V_{EBO}	5	V
最大集电极直流电流	Collector Current（DC）	I_C	12	A
最大集电极脉冲电流	Collector Current（pulse）	I_{CP}	15	A
最大基极直流电流	Base Current（DC）	I_B	200	mA
最大集电极耗散功率	Total Dissipation (TO-220C)	P_C	80	W
最大集电极耗散功率	Total Dissipation (DPAK)	P_C	40	W
最高结温	Junction Temperature	T_j	150	℃
贮存温度	Storage Temperature	T_{stg}	-55~+150	℃

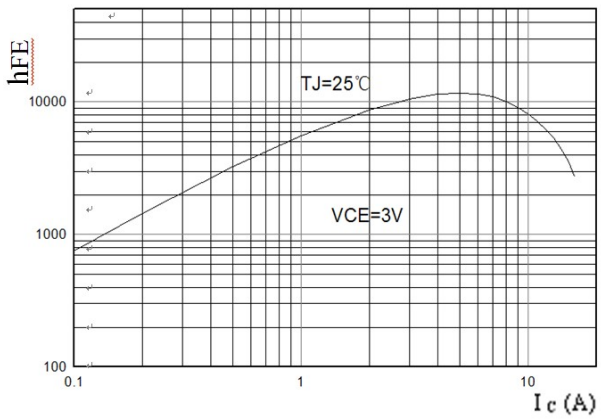
电特性 EIECTRICAL CHARACTERISTIC

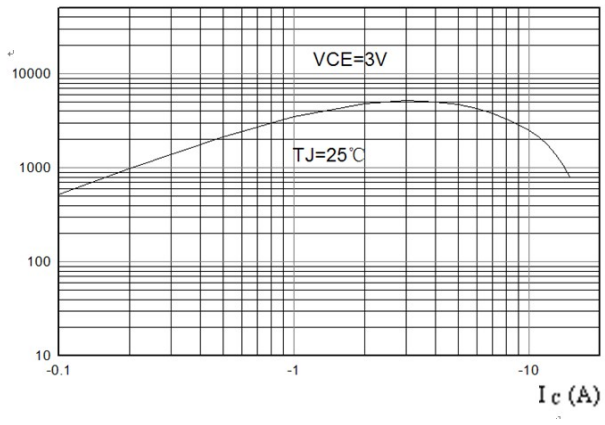
项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单位 Unit
$V_{(BR)CEO}$	I_C=10mA ,I_B=0	100	-	-	V
$V_{(BR)CBO}$	I_C=1 mA ,I_E=0	100	-	-	V
I_{CBO}	V_{CB}=100V, I_E=0	-	-	0.1	mA
I_{CEO}	V_{CE}=100V,I_B=0	-	-	1	mA
I_{EBO}	V_{EB}=5V, I_C=0	-	-	2	mA
hFE(1)	V_{CE} =3V, I_C=3A	1000	-	-	
hFE(2)	V_{CE} =3V, I_C=5A	750	-	20K	
hFE(3)	V_{CE} =3V, I_C=10A	100	-	-	
$V_{CE(sat)}$(1)	I_C=5A, I_B=20mA	-	-	2.0	V
$V_{CE(sat)}$(2)	I_C=10A, I_B=100mA	-	-	3.0	V
$V_{BE(sat)}$(1)	I_C=5A, I_B=20mA	-	-	2.5	V
$V_{BE(sat)}$(2)	I_C=10A, I_B=100mA	-	-	4.0	V

特征曲线 ELECTRICAL CHARACTERISTICS (curves)

BDW93C **BDW94C**

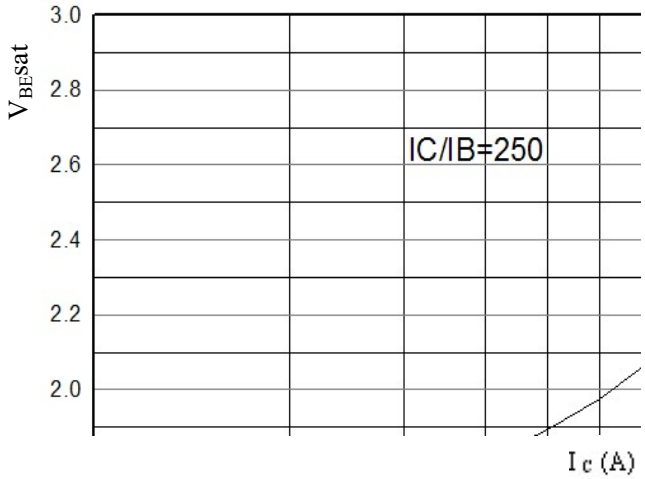
hFE – Ic

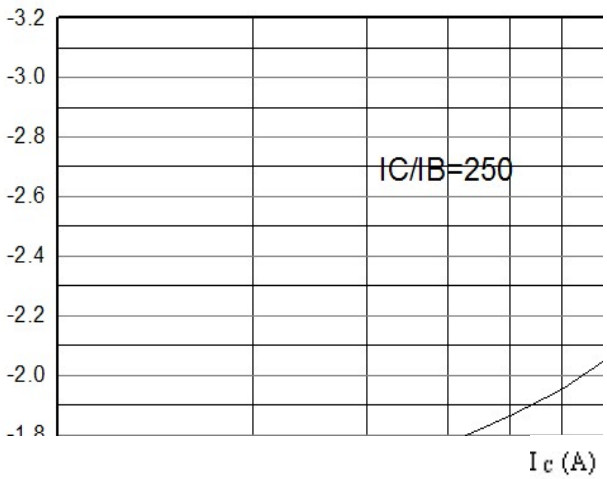




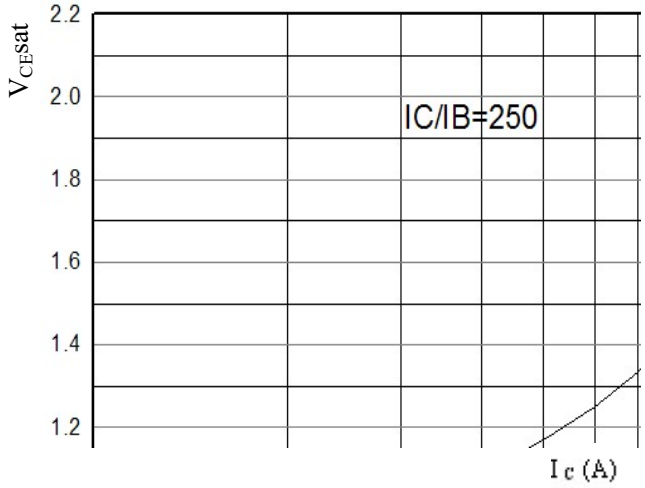
BDW93C **BDW94C**

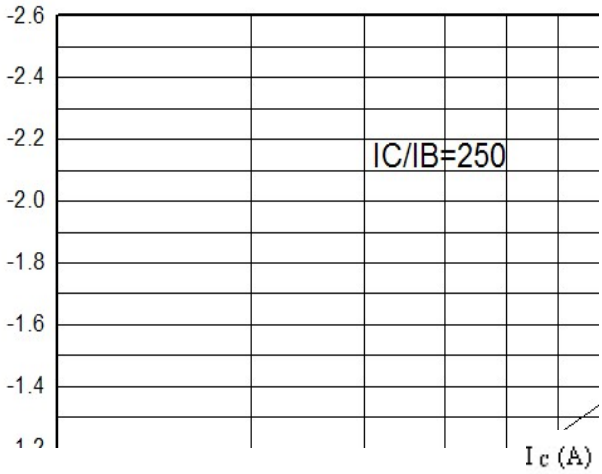
V_{BE}（sat）- I_C



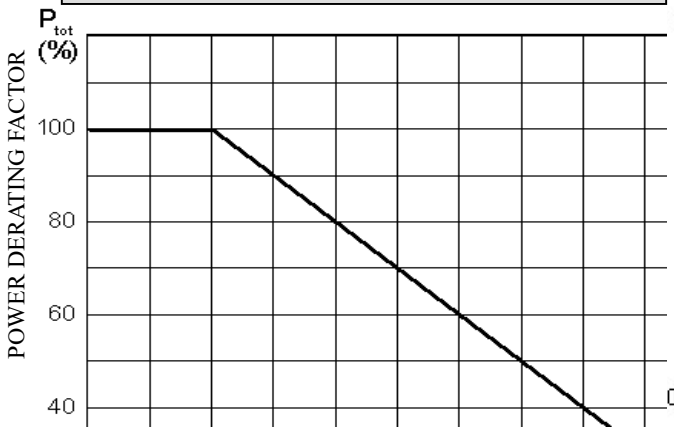


$V_{CE(sat)}$- I_C

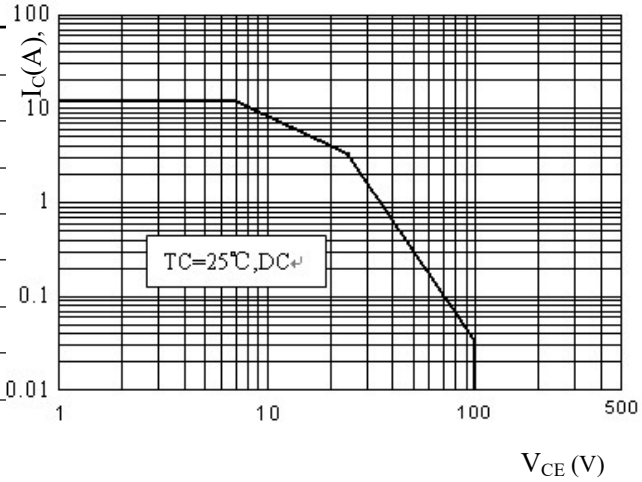




P_C-T_C

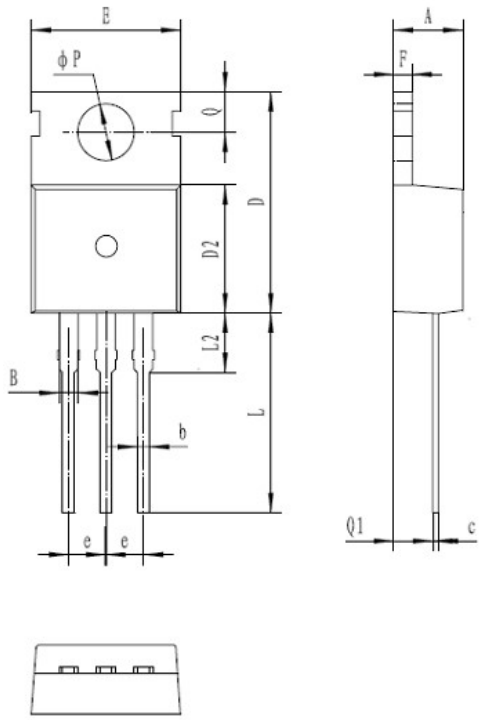


SOA



外形尺寸 PACKAGE MECHANICAL DATA

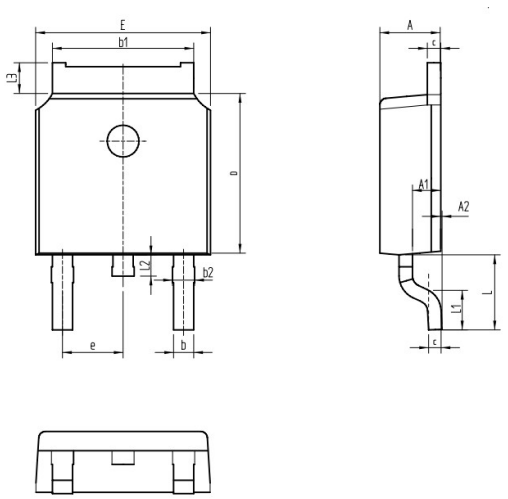
TO-220C



单位 Unit ：mm

符号	尺寸（mm）
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
P	3.50-3.80
Q	2.60-3.00
Q1	2.20-2.60

DPAK



单位Unit ：mm

符号	尺寸（mm）
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

注意事项

1. 吉林华微电子股份有限公司的产品销售分为直销和销售代理，无论哪种方式，订货时请与公司核实。
2. 购买时请认清公司商标，如有疑问请与公司本部联系。
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。

NOTE

1. Jilin Sino-microelectronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this. specification sheet and is subject to change without prior notice.

联系方式

吉林华微电子股份有限公司
公司地址：吉林省吉林市深圳街 99 号
邮编：132013
总机：86-432-64678411
传真：86-432-64665812
网址：www.hwdz.com.cn

CONTACT

JILIN SINO-MICROELECTRONICS CO., LTD.
ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China.
Post Code: 132013
Tel： 86-432-64678411
Fax：86-432-64665812
Web Site：www.hwdz.com.cn