

BRDBC846WS

Rev.B Jul.-2023

DATA SHEET

描述 / Descriptions

SOT-363 塑封封装双 NPN 半导体三极管。Double silicon NPN transistor in a SOT-363 Plastic Package.

特征 / Features

高电压,与 BRDBC856WS 互补,无卤产品。

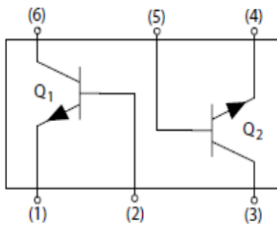
High voltage, complementary pair with BRDBC856WS, HF Product.

用途 / Applications

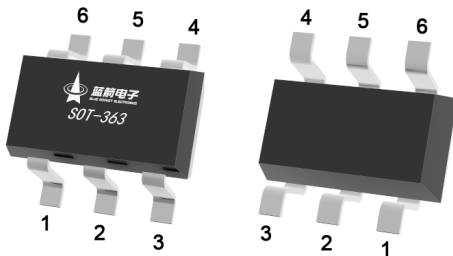
用于普通高压放大。

General purpose high voltage amplifier.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1、4 : Emitter

PIN 2、5 : Base

PIN 3、6 : Collector

放大及印章代码 / hFE Classifications & Marking

h _{FE} Classifications Symbol	A	B
h _{FE} Range	110~220	200~450
Marking	1A	1B

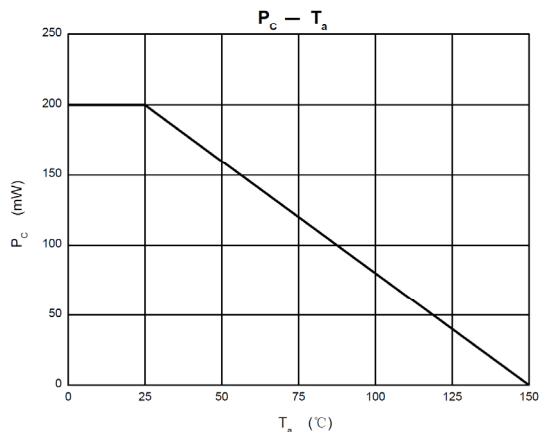
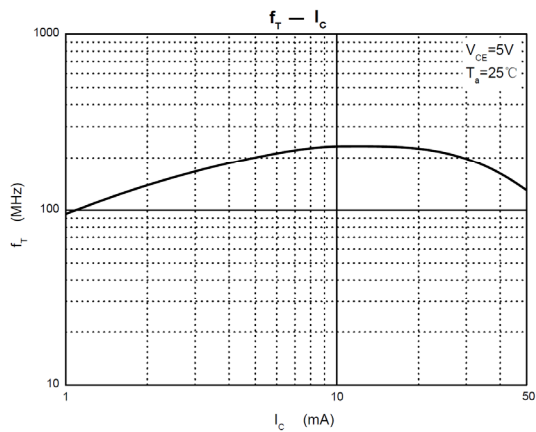
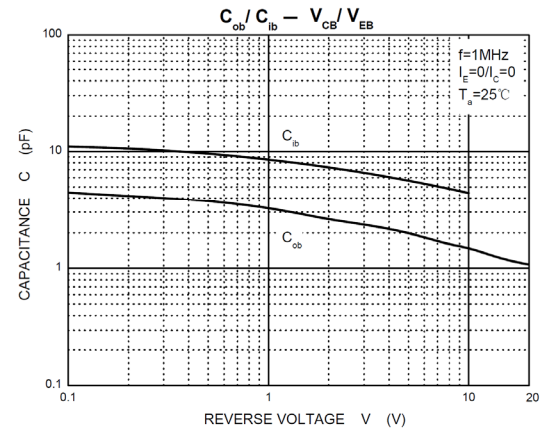
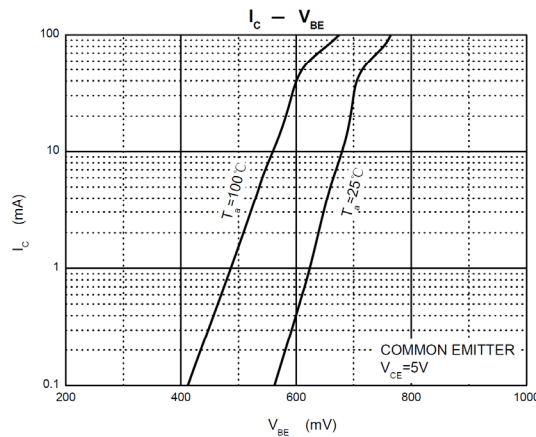
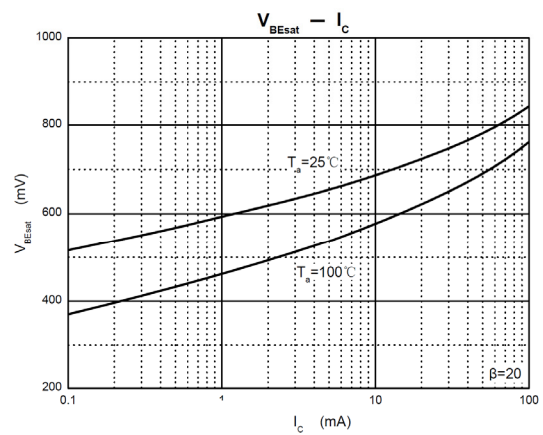
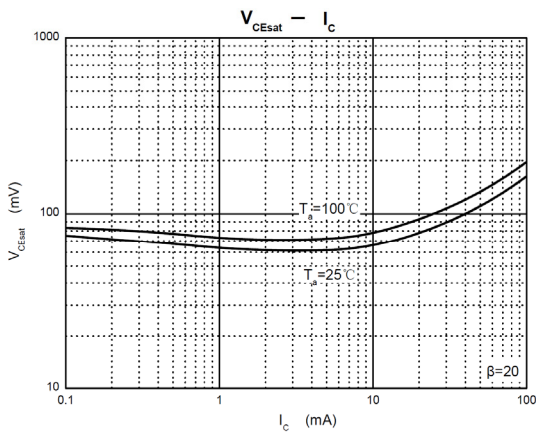
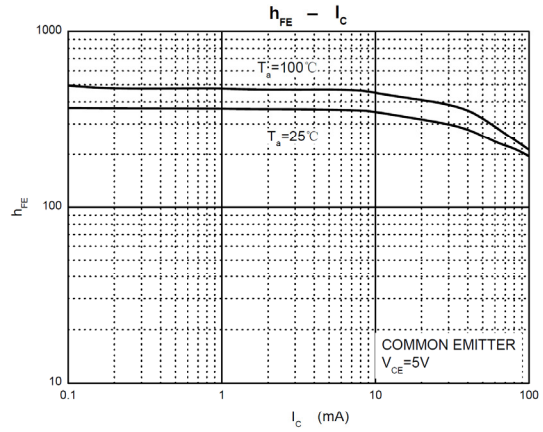
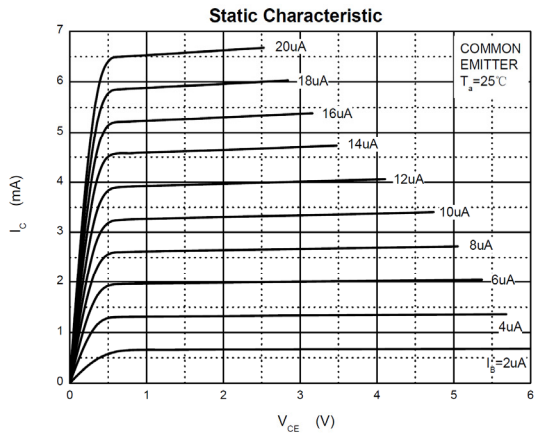
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V _{CBO}	80	V
Collector to Emitter Voltage	V _{CEO}	65	V
Emitter to Base Voltage	V _{EBO}	6.0	V
Collector Current - Continuous	I _C	100	mA
Collector Power Dissipation	P _C	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55 ~ 150	°C

电性能参数 / Electrical Characteristics(Ta=25°C)

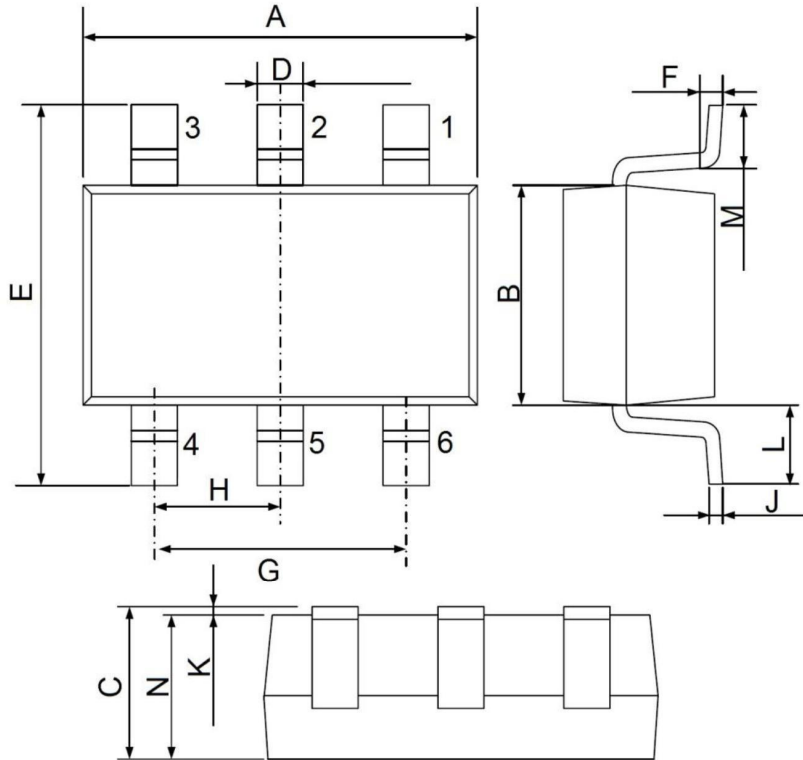
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector-Base Breakdown Voltage	V _{CBO}	I _C = 10μA I _E = 0	80			V
Collector-Emitter Breakdown Voltage	V _{CEO}	I _C = 10mA I _B = 0	65			V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E = 10μA I _C = 0	6.0			V
Collector Cut-Off Current	I _{CBO}	V _{CB} = 30V I _E = 0			15	nA
Emitter Cut-Off Current	I _{EBO}	V _{EB} = 5V I _C = 0			500	nA
DC Current Gain	h _{FE}	V _{CE} = 5.0V I _C = 2.0mA	110		450	
Collector to Emitter Saturation Voltage	V _{CE(sat)(1)}	I _C = 10mA I _B = 0.5mA			0.1	V
	V _{CE(sat)(2)}	I _C = 100mA I _B = 5.0mA			0.3	V
Base to Emitter Saturation Voltage	V _{BE(sat)}	I _C = 10mA I _B = 0.5mA		0.77		V
Transition Frequency	f _T	V _{CB} = 5.0V I _E = 10mA f = 100MHz	100			MHz
Collector Output Capacitance	C _{ob}	V _{CB} = 10V I _E = 0 f = 1.0MHz			1.5	pF

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

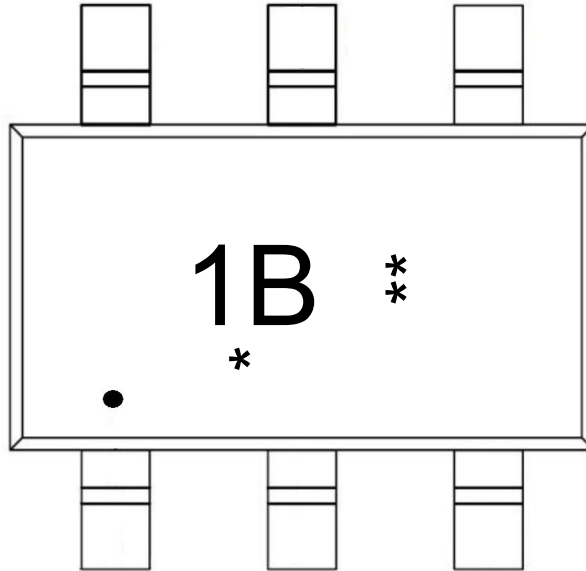
SOT-363-6L



UNIT: mm

DIM	MIN	MAX
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	1.95	2.25
F	0.20 Typ.	
G	1.20	1.40
H	0.65 Typ.	
J	0.08	0.15
K	0.00	0.10
L	0.525 Ref.	
M	0.26	0.46
N	0.90	1.10

印章说明 / Marking Instructions

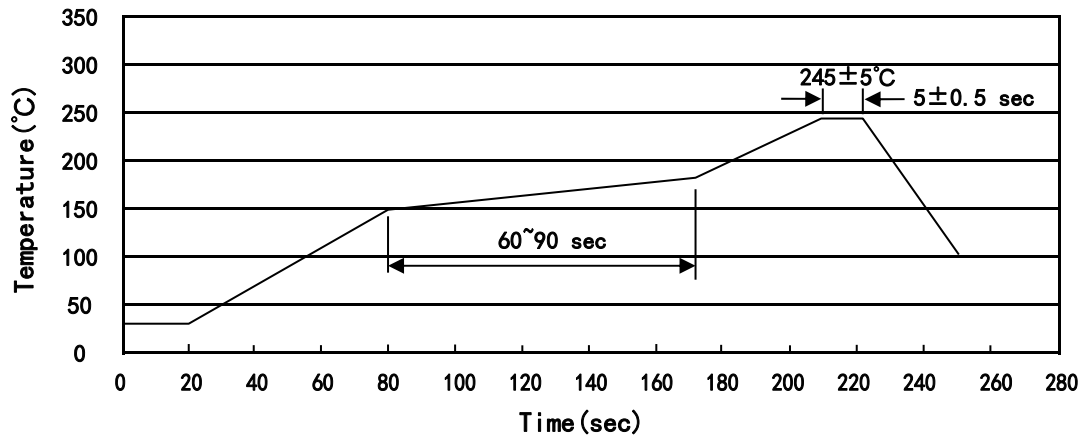


说明：

- ： 为“1”脚
- 1： 为型号代码
- B： 为 h_{FE} 档次代码
- ***： 为生产批号代码，随生产批号变化

Note:

- ： “1” Pin
- 1： Product Type Code
- B： h_{FE} Classifications Symbol Code
- ***： Lot No. Code, code change with Lot No

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)


说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-363	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices