

# BRDBC856WS

Rev.B Jul.-2023

## 描述 / Descriptions

SOT-363 塑封封装双 PNP 半导体三极管。

Double silicon PNP transistor in a SOT-363 Plastic Package.

## 特征 / Features

高电压,与 BRDBC846WS 互补,无卤产品。

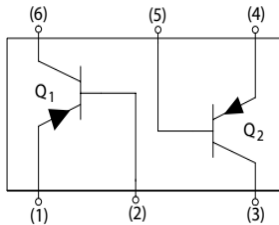
High voltage, complementary pair with BRDBC846WS, HF Product.

## 用途 / Applications

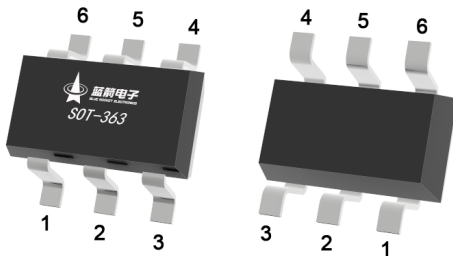
用于普通高压放大。

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

hFE Classifications Symbol	A	B
hFE Range	125~250	220~475
Marking	3A	3B

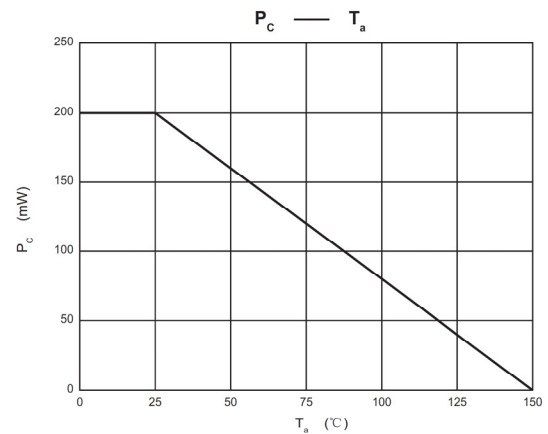
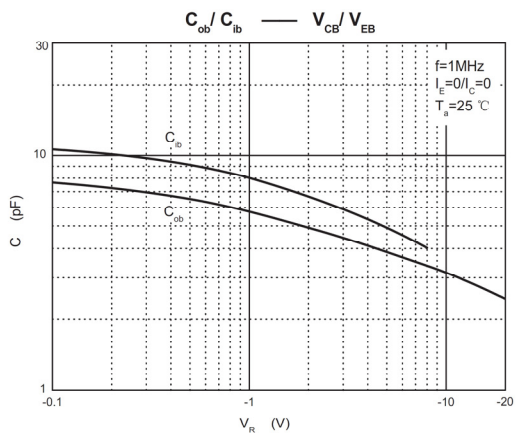
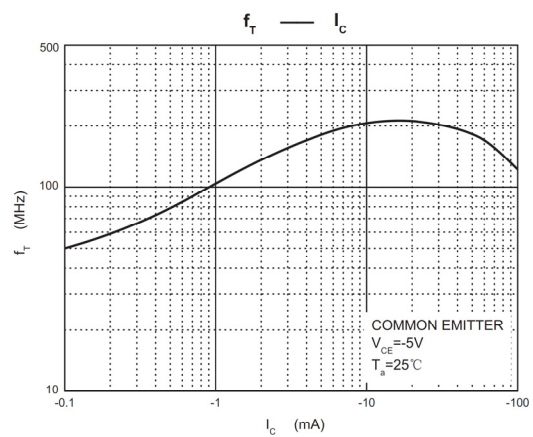
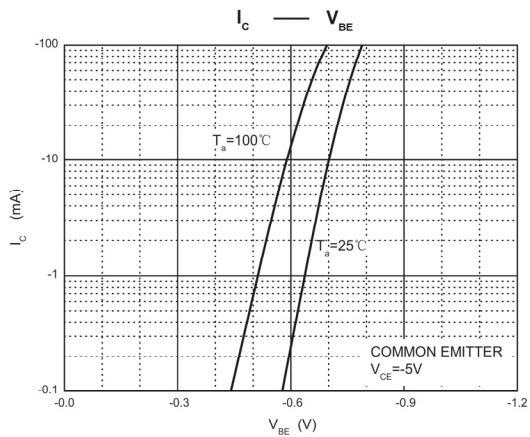
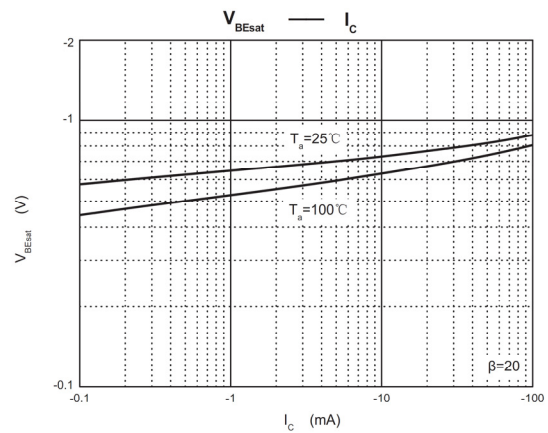
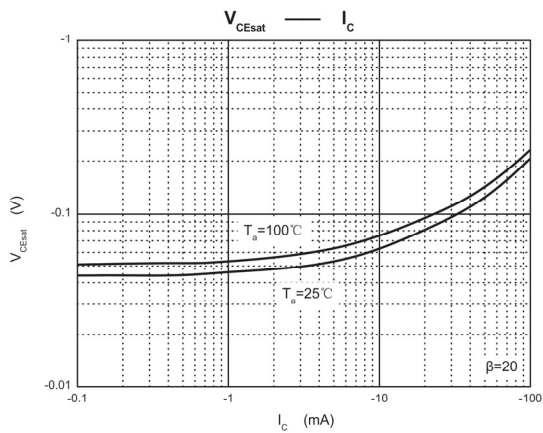
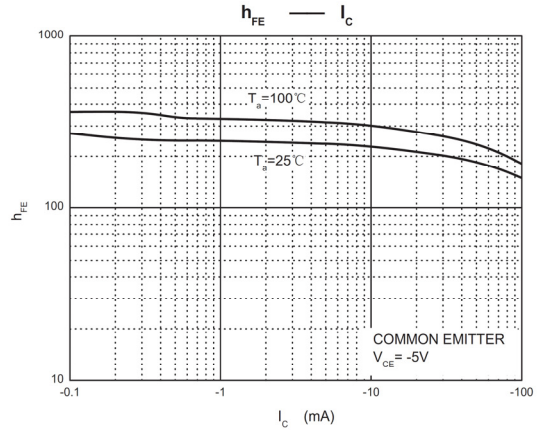
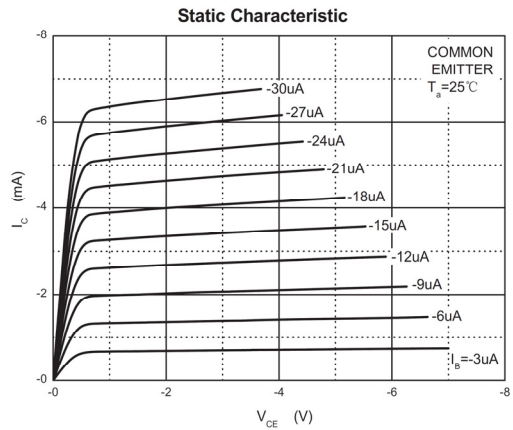
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V <sub>CB0</sub>	-80	V
Collector to Emitter Voltage	V <sub>CEO</sub>	-65	V
Emitter to Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current - Continuous	I <sub>C</sub>	-100	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Thermal Resistance-Junction to Ambient	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>j</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

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

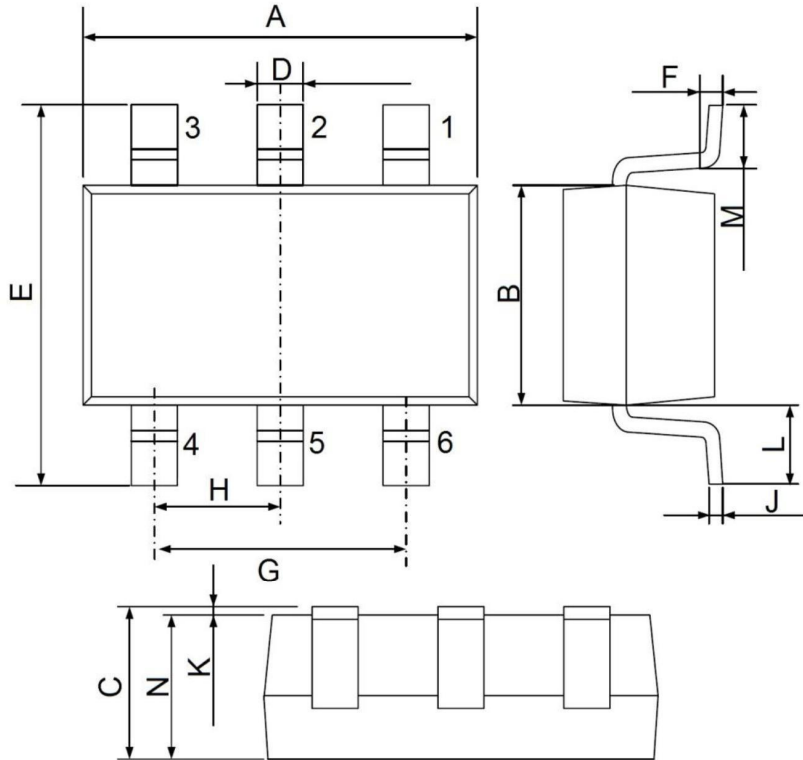
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector-Base Breakdown Voltage	V <sub>CB0</sub>	I <sub>C</sub> = -10μA I <sub>E</sub> = 0	-80			V
Collector-Emitter Breakdown Voltage	V <sub>CEO</sub>	I <sub>C</sub> = -10mA I <sub>B</sub> = 0	-65			V
Emitter-Base Breakdown Voltage	V <sub>EBO</sub>	I <sub>E</sub> = -10μA I <sub>C</sub> = 0	-5			V
Collector Cut-Off Current	I <sub>CB0</sub>	V <sub>CB</sub> = -30V I <sub>E</sub> = 0			-15	nA
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V I <sub>C</sub> = 0			-100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = -5.0V I <sub>C</sub> = -2.0mA	125		475	
Collector to Emitter Saturation Voltage	V <sub>CE(sat)(1)</sub>	I <sub>C</sub> = -10mA I <sub>B</sub> = -0.5mA			-0.1	V
	V <sub>CE(sat)(2)</sub>	I <sub>C</sub> = -100mA I <sub>B</sub> = -5.0mA			-0.3	V
Base to Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -10mA I <sub>B</sub> = -0.5mA		-0.7		V
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V I <sub>E</sub> = 0 f = 1.0MHz			2.5	pF
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = -5.0V I <sub>C</sub> = -10mA f = 100MHz	100			MHz

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

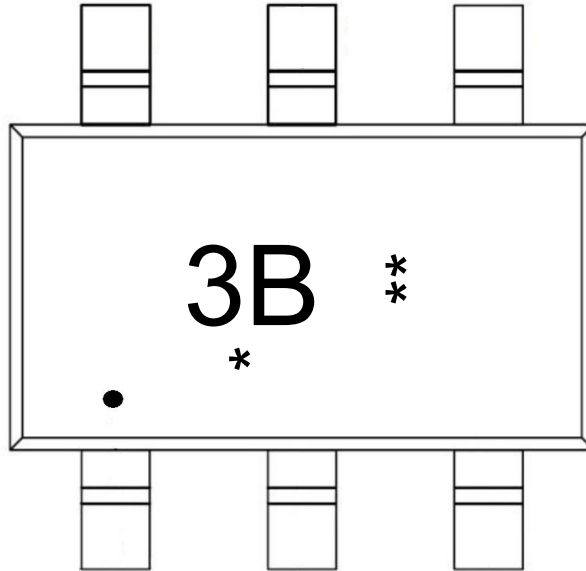
**SOT-363-6L**



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

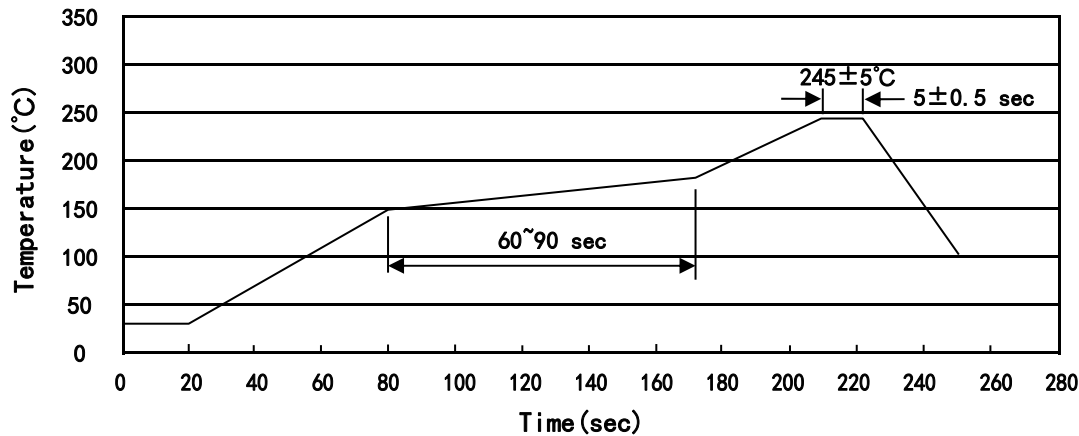


说明：

- ： 为“1”脚
- 3： 为型号代码
- B： 为 h<sub>FE</sub> 档次代码
- \*\*\*： 为生产批号代码，随生产批号变化

Note:

- ： “1” Pin
- 3： Product Type Code
- B： h<sub>FE</sub> 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 <sup>3</sup> )		
	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**