

**Description**

Silicon PNP transistor in a SOT-89 Plastic Package

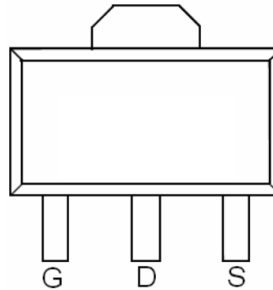
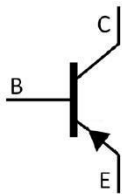
**Applications**

General power amplifier applications.

**Features**

- High breakdown voltage
- Good  $h_{FE}$  linearity
- Low  $V_{CE(sat)}$
- Complements the 2SD1898
- Halogen-free product

Symbol	Parameter	Max	Unit
$V_{CEO}$	collector-emitter voltage	-80	V
$I_c$	collector current (DC)	-1.0	A

**Equivalent Circuit & Pinning**


SOT-89 top view

PIN1: Base

PIN 2: Collector

PIN 3: Emitter

 **$h_{FE}$  Classifications & Marking**

$h_{FE}$ Classifications Symbol	P	Q	R
$h_{FE}$ Range	82~180	120~270	180~390
Marking	HBHP	HBHQ	HBHR

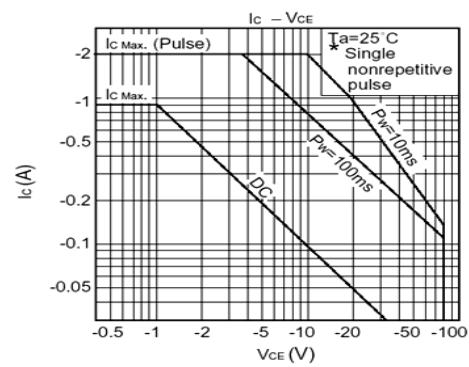
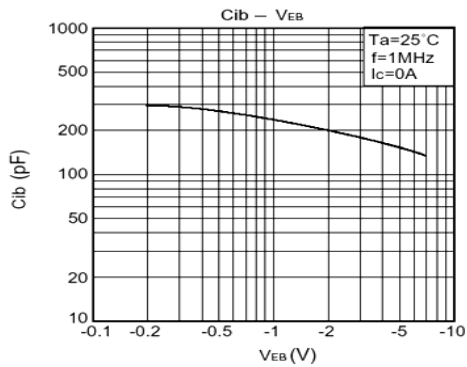
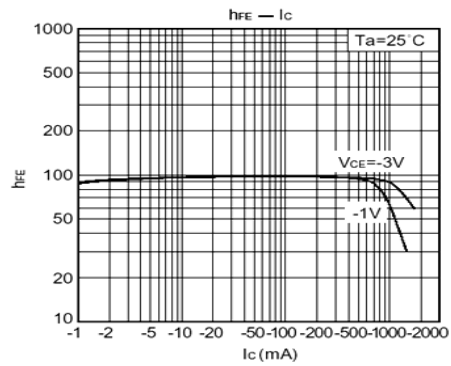
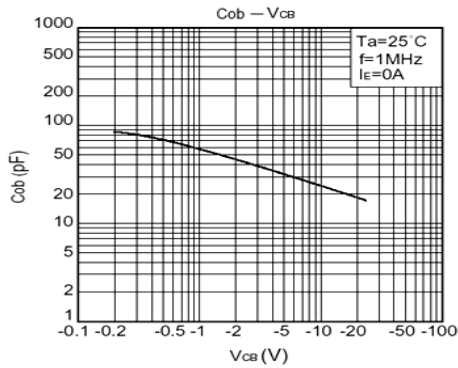
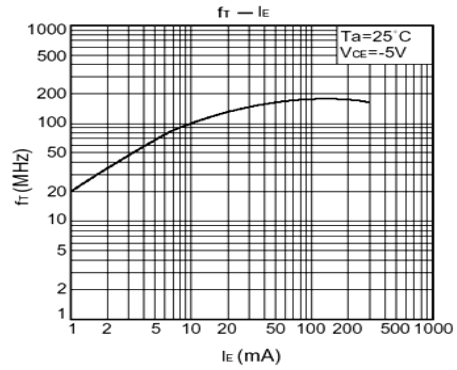
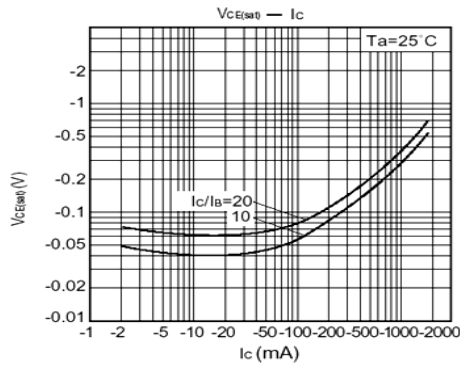
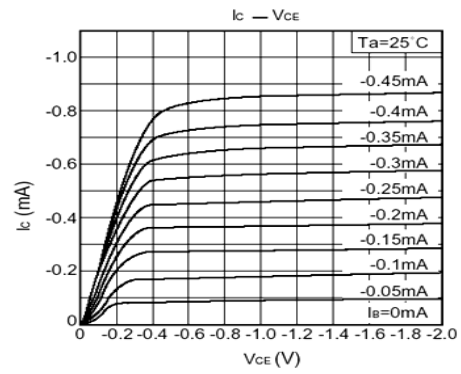
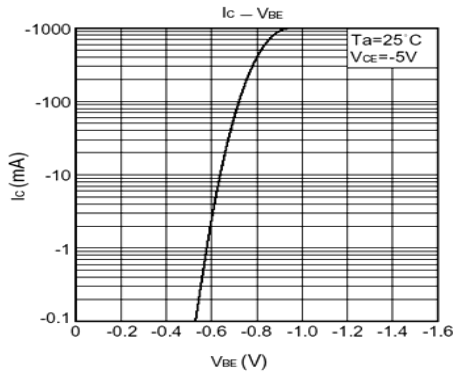
**Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-80	V
Collector to Emitter Voltage	$V_{CEO}$	-80	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current-Continuous	$I_C$	-1.0	A
Collector Current-Continuous(Pulse)	$*I_{CP}$	-2.0	A
Collector Power Dissipation	$**P_C$	0.5	W
	$*P_C$	2.0	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

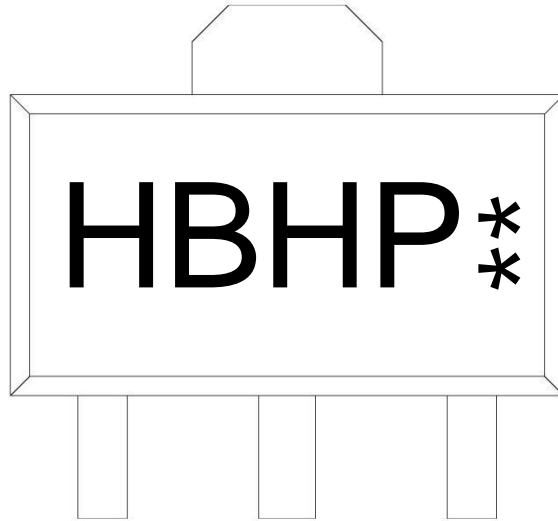
**Electrical Characteristics(Ta=25°C)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=-50\mu A$ $I_E=0$	-80			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=-1.0mA$ $I_B=0$	-80			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=-50\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-60V$ $I_E=0$			-1.0	$\mu A$
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{EB}=-4.0V$ $I_C=0$			-1.0	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=-3.0V$ $I_C=-0.1A$	82		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$			-0.4	V
Transition Frequency	$f_T$	$V_{CE}=-5.0V$ $f=30MHz$ $I_C=-50mA$		100		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CE}=-10V$ $f=1.0MHz$ $I_E=0$		25		pF

Electrical Characteristic Curve



Marking Instructions



Note:

- H: Company Code
- BH: Product Type
- P:  $h_{FE}$  Classifications Symbol
- \*\* : Lot No. Code, code change with Lot No

$h_{FE}$ Classifications Symbol	P	Q	R
$h_{FE}$ Range	82~180	120~270	180~390
Marking	HBHP	HBHQ	HBHR

Packaging SPEC.

REEL INFORMATION

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-89	1,000	7	7,000	8	56,000	7" x12	180x120x180	385x257x392

Package Outline Dimensions

SOT-89

单位: mm

