



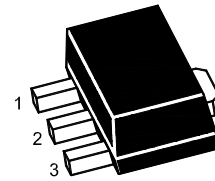
2SB1188SQ

PNP Transistor

SOT-89

Features

- Low collector saturation voltage
- Excellent h_{FE} characteristics



1. Base 2. Collector 3. Emitter

Marking: 1188-P
1188-Q
1188-R

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

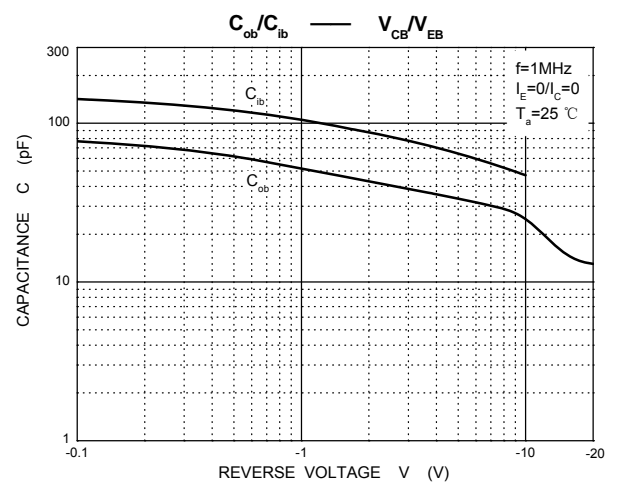
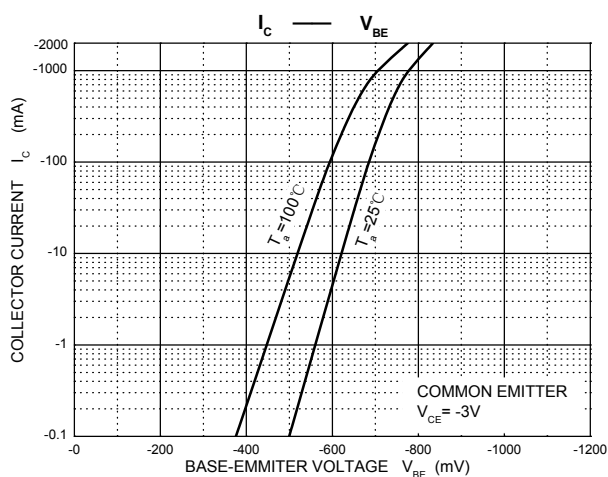
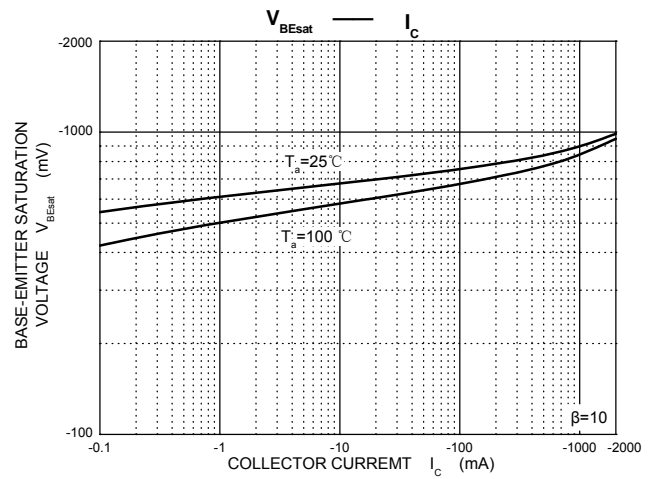
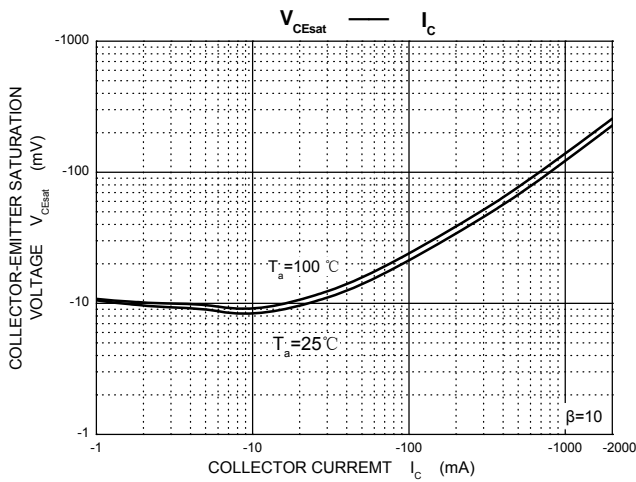
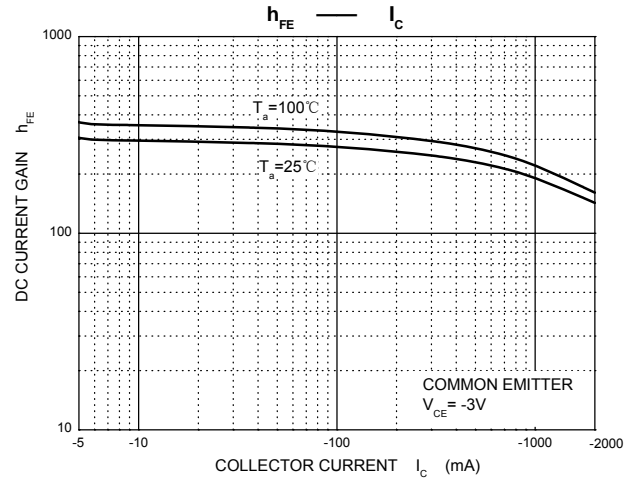
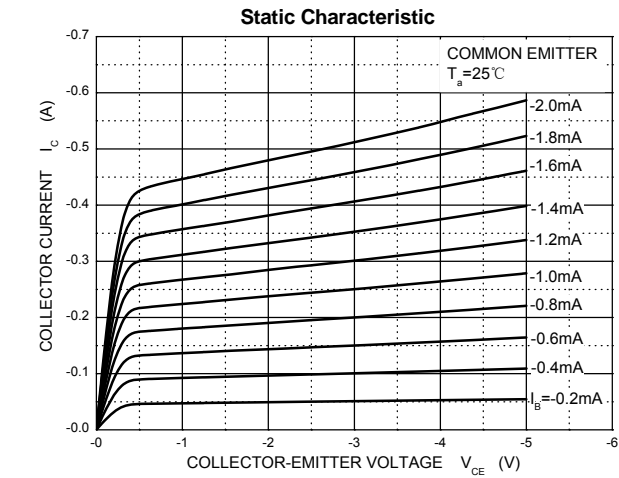
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	32	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	2	A
Collector Power Dissipation	P_C	0.5	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 3\text{ V}$, $-I_C = 500\text{ mA}$ Current Gain Group	P h_{FE}	82	-	180	-
	Q h_{FE}	120	-	270	-
	R h_{FE}	180	-	390	-
Collector Base Cutoff Current at $-V_{CB} = 20\text{ V}$	$-I_{CBO}$	-	-	1	μA
Emitter Base Cutoff Current at $-V_{EB} = 4\text{ V}$	$-I_{EBO}$	-	-	1	μA
Collector Base Breakdown Voltage at $-I_C = 50\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	32	-	-	V
Emitter Base Breakdown Voltage at $-I_E = 50\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $-I_C = 2\text{ A}$, $-I_B = 200\text{ mA}$	$-V_{CE(sat)}$	-	-	0.8	V
Transition Frequency at $-V_{CE} = 5\text{ V}$, $-I_C = 500\text{ mA}$, $f = 30\text{ MHz}$	f_T	-	100	-	MHz
Output Capacitance at $-V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$	C_{ob}	-	50	-	pF



Typical Characteristics Curves

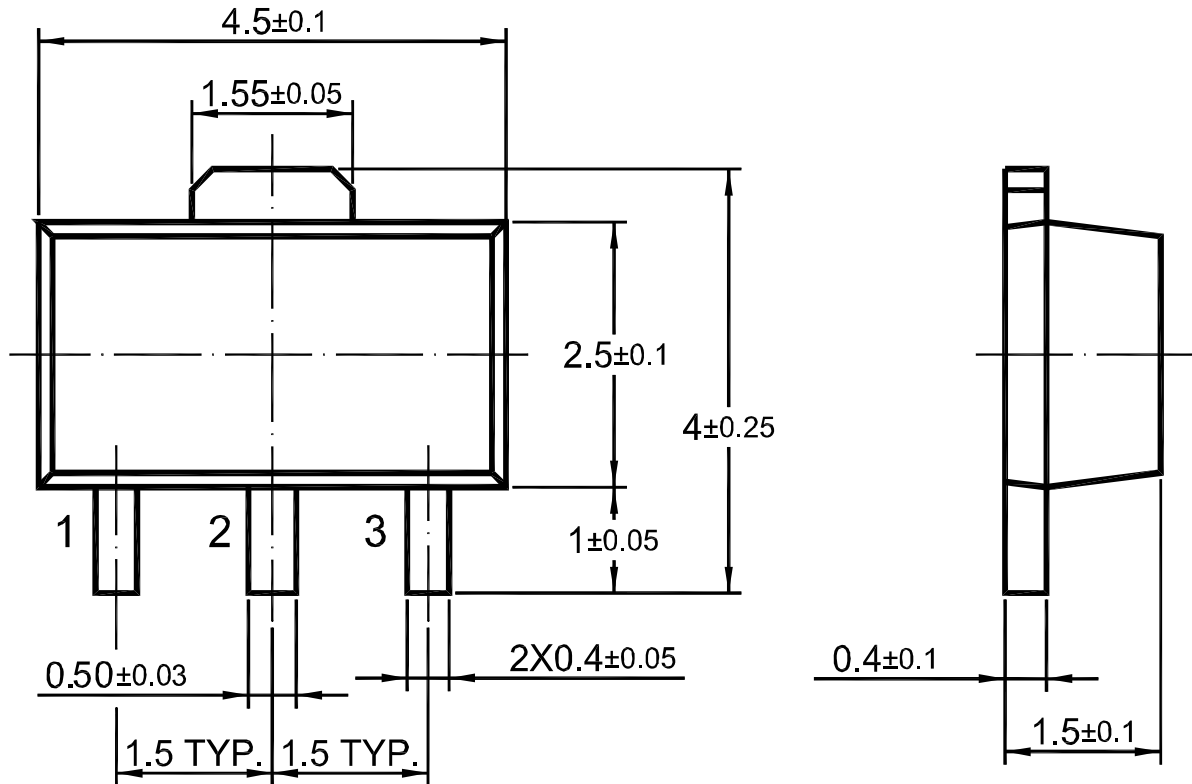




Package Outline

SOT-89

Dimensions in mm



Ordering information

Device	Package	Shipping
2SB1188SQ	SOT-89	1000/Tape&Reel(7inches)