WILLAS

RoHS COMPLIANT

SOT-89 Plastic-Encapsulate Transistors

2SB1188

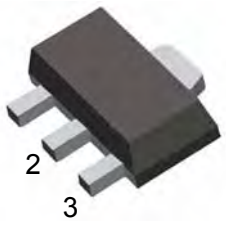
TRANSISTOR (PNP)

FEATURES

- Low $V_{CE(sat)}$.$V_{CE(sat)}$ = -0.5V (Typ.)(I_C/I_B = -2A / -0.2A)
- Complements the 2SD1766
- Weight: 0.05 g
- RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

SOT-89

1. BASE
2. COLLECTO 1
3. EMITTER



MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-2	A
P_C	Collector Power Dissipation	0.5 (2.0*)	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

* When mounted on a 40*40*1mm ceramic board.

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-50μA , I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -1mA , I_B=0	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-50μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20 V , I_E=0			-1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4 V , I_C=0			-1	μA
DC current gain *	h_{FE}	V_{CE}=-3V, I_C= -0.5A	82		390	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=-2A, I_B= -0.2A			-0.8	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-0.5A ,f=30MHz		100		MHz
Output capacitance	C_{ob}	V_{CB}=-10V, I_E=0 ,f=1MHz		50		pF

* Measured using pulse current.

CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	BCP	BCQ	BCR
P/N	2SB1188P	2SB1188Q	2SB1188

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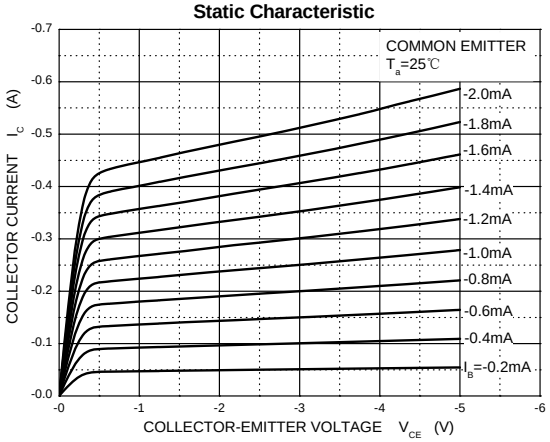
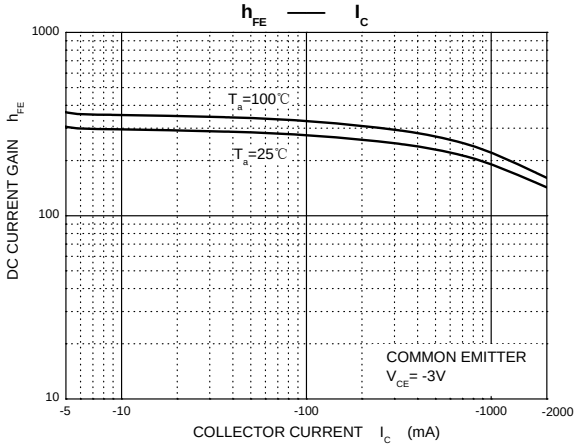
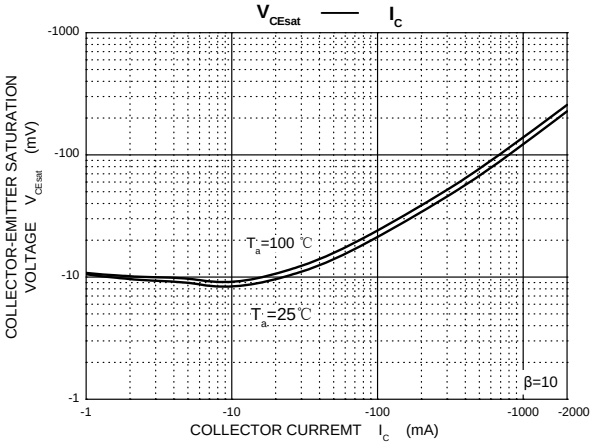
Static Characteristic



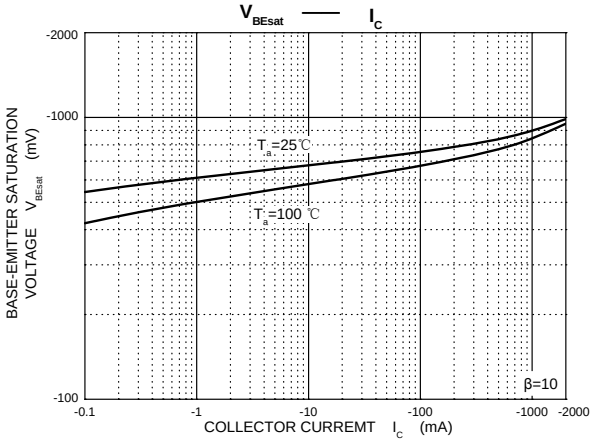
h_{FE} —— I_C



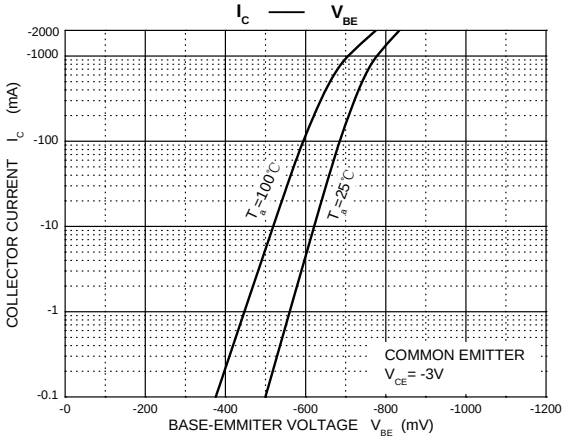
V_{CEsat} —— I_C



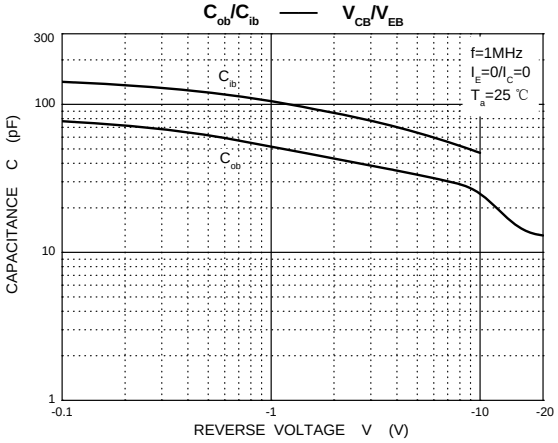
V_{BEsat} —— I_C



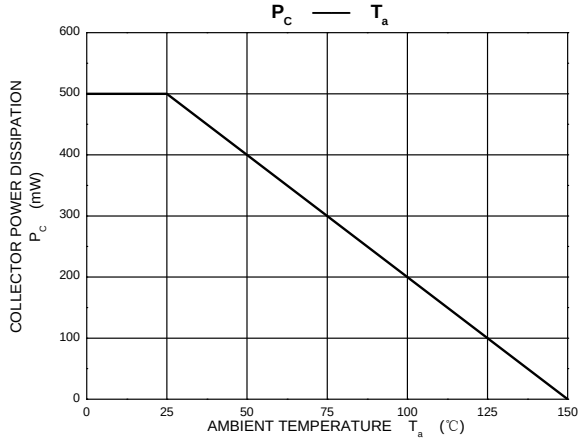
I_C —— V_{BE}



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



P_C —— T_a



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RoHS COMPLIANT

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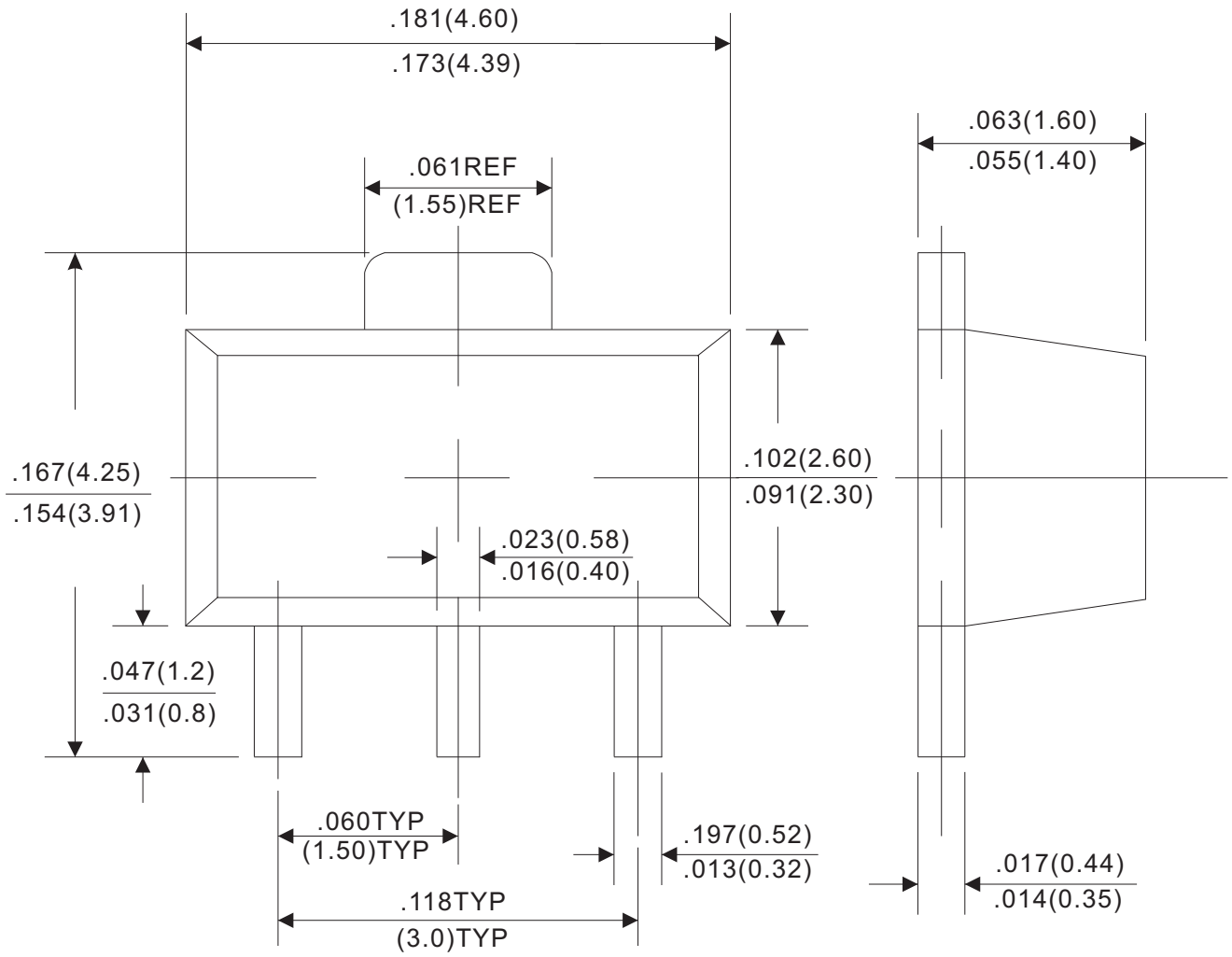
Outline Drawing

SOT-89



Dimensions in inches and (millimeters)

Rev.C