

SOT-89 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

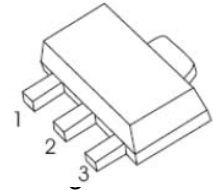
- **Low $V_{CE(sat)}$**
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Continuous Collector Current	-1	A
I_{CP}^*	Pulsed Collector Current	2	A
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER



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ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu\text{A}, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			-0.5	μA
DC current gain	h_{FE}	$V_{CE}=-3\text{V}, I_C=-100\text{mA}$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$		-0.2	-0.5	V
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-50\text{mA}, f=30\text{MHz}$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		20	30	pF

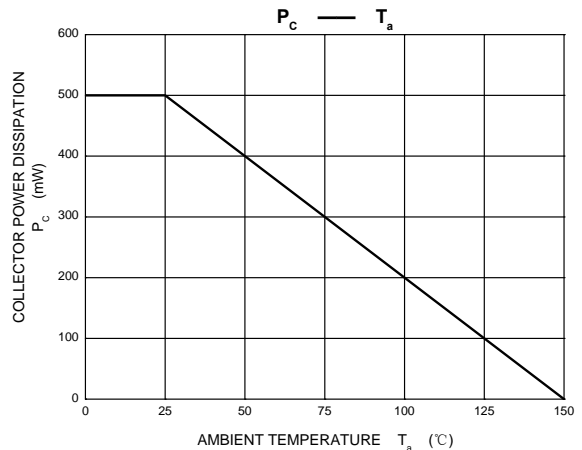
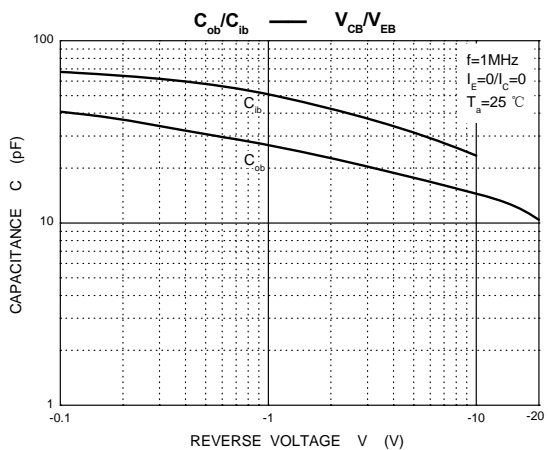
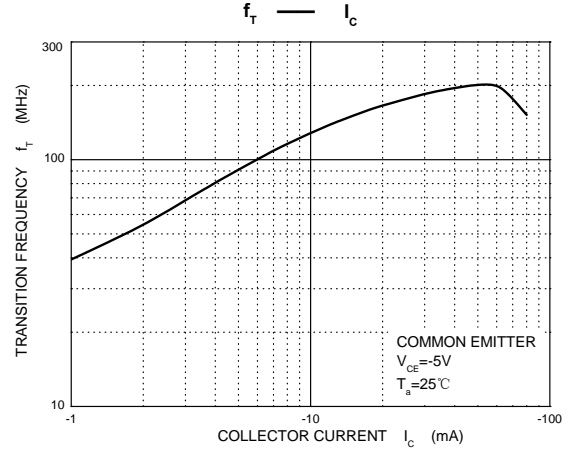
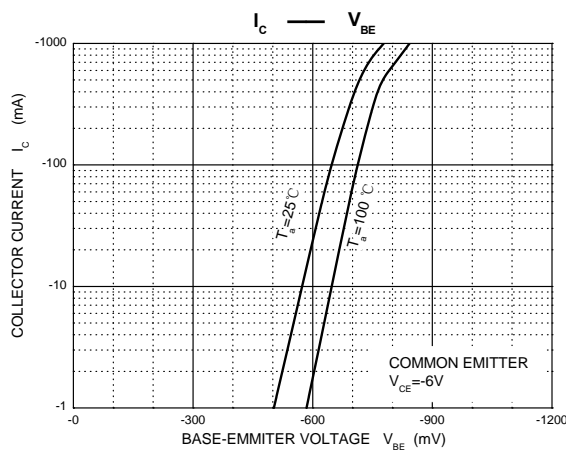
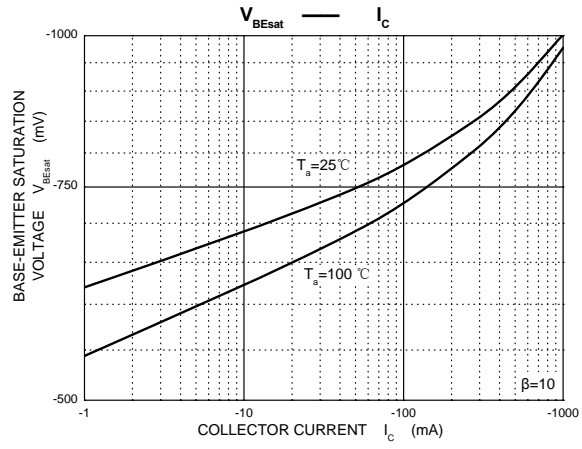
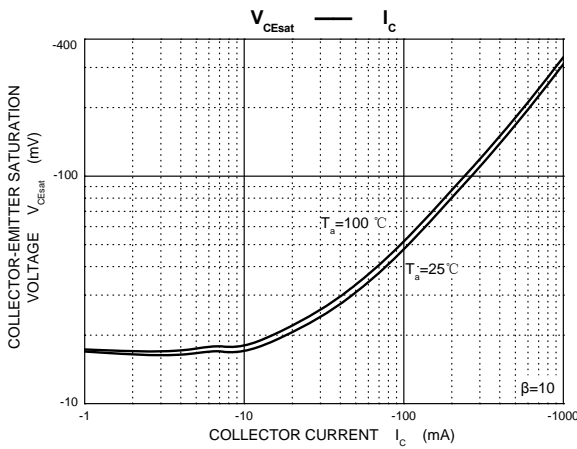
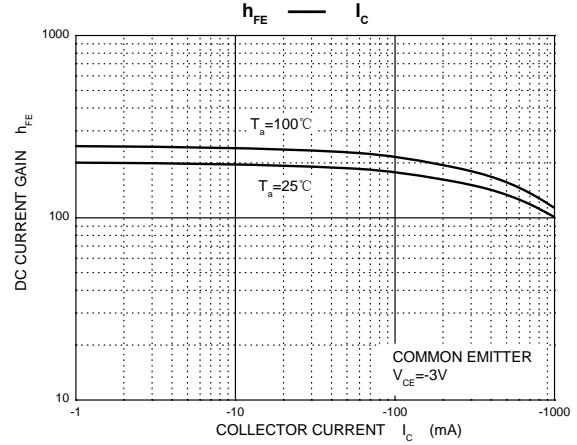
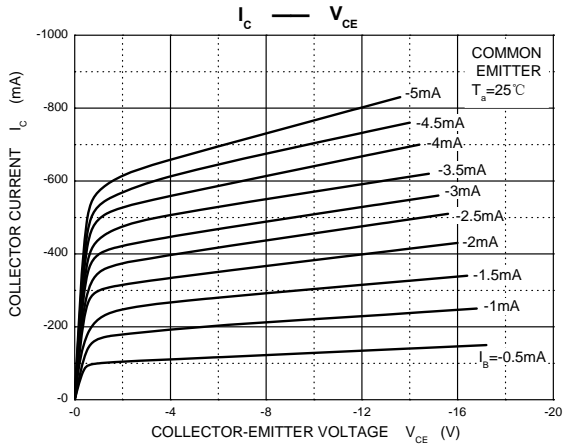
CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	BAP	BAQ	BAR



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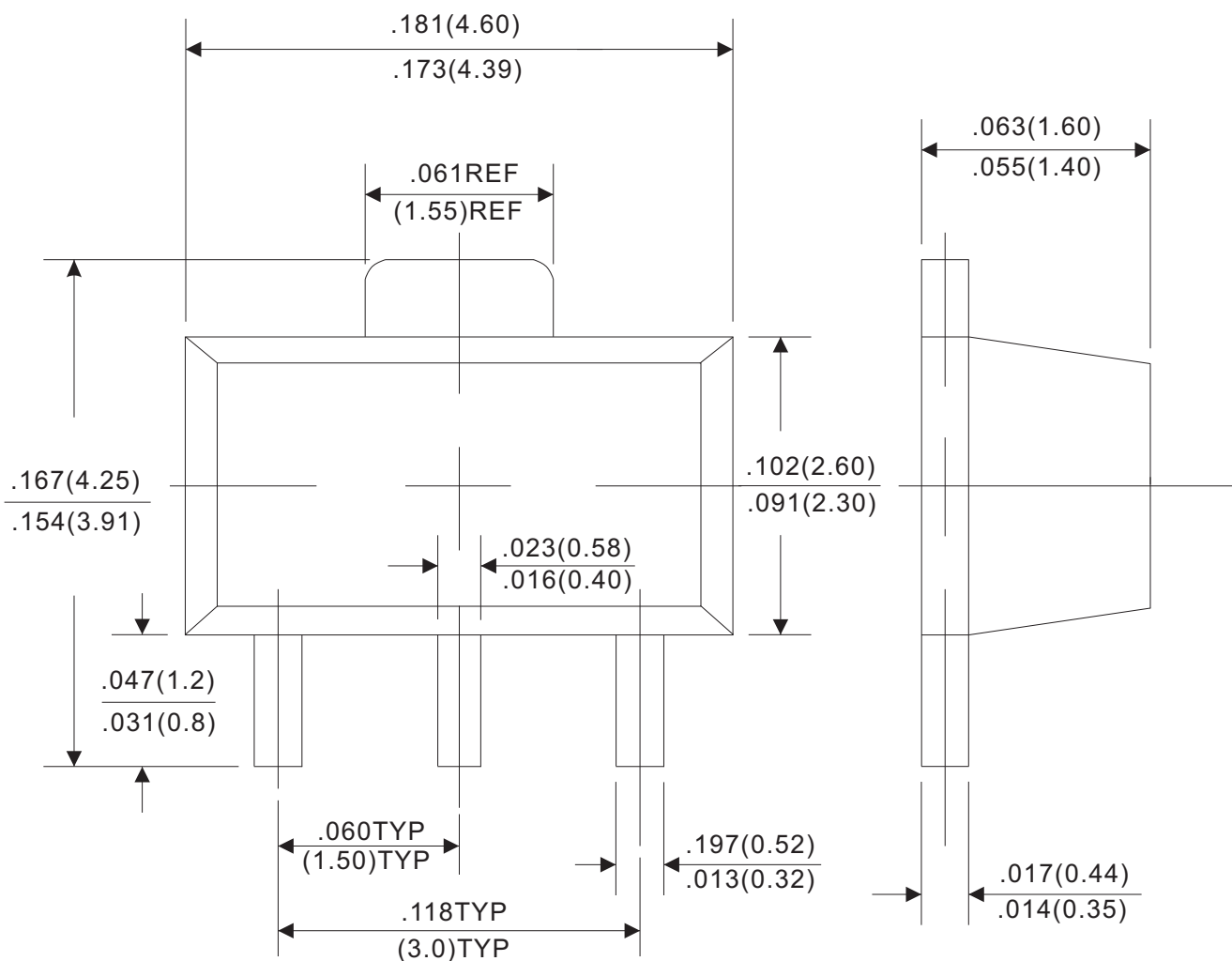
Typical Characteristics





Outline Drawing

SOT-89



Dimensions in inches and (millimeters)



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Ordering Information:

Device PN	Packing
2SB1132 x ⁽³⁾ -SOT89 ⁽¹⁾ G ⁽²⁾ -WS	Tape& Reel: 1 Kpcs/Reel

Note: (1) CASE:SOT-89

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) CLASSIFICATION OF hFE RANK

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