

## TO-92MOD Plastic-Encapsulate Transistors

### 2SB892 TRANSISTOR (PNP)

#### FEATURE

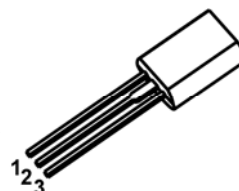
- Power Supplies, Relay Drivers, Lamp Drivers, and Automotive Wiring
- Low Saturation Voltage.
- Large Current Capacity and Wide ASO.

#### TO-92MOD

1. EMITTER

2. COLLECTOR

3. BASE



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

Symbol	Parameter	Value	Unit
$V_{CB0}$	Collector-Base Voltage	-60	V
$V_{CE0}$	Collector-Emitter Voltage	-50	V
$V_{EB0}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current -Continuous	-2	A
$P_C$	Collector Dissipation	1	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

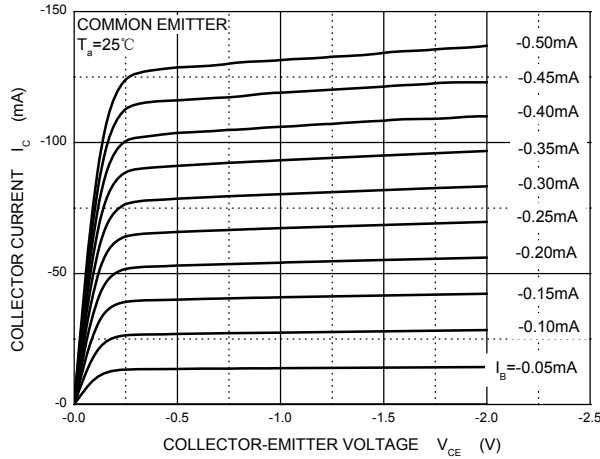
#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CB0}$	$I_C = -100\mu\text{A}$ , $I_E = 0$	-60		V
Collector-emitter breakdown voltage	$V(BR)_{CE0}$	$I_C = -1\text{mA}$ , $I_B = 0$	-50		V
Emitter-base breakdown voltage	$V(BR)_{EB0}$	$I_E = -100\mu\text{A}$ , $I_C = 0$	-6		V
Collector cut-off current	$I_{CB0}$	$V_{CB} = -50\text{V}$ , $I_E = 0$		-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -4\text{V}$ , $I_C = 0$		-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}$ , $I_C = -100\text{mA}$	100	560	
	$h_{FE(2)}$	$V_{CE} = -2\text{V}$ , $I_C = -1.5\text{A}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1\text{A}$ , $I_B = -50\text{mA}$		-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1\text{A}$ , $I_B = -50\text{mA}$		-1.2	V
Transition frequency	$f_T$	$V_{CE} = -10\text{V}$ , $I_C = -50\text{mA}$	150		MHz

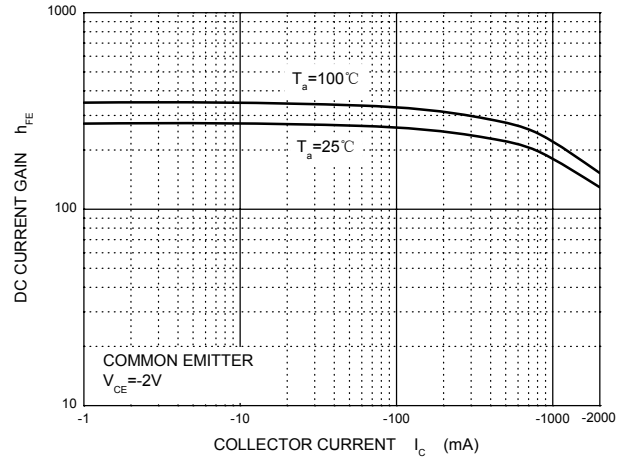
#### CLASSIFICATION OF $h_{FE(1)}$

Rank	R	S	T	U
Range	100-200	140-280	200-400	280-560

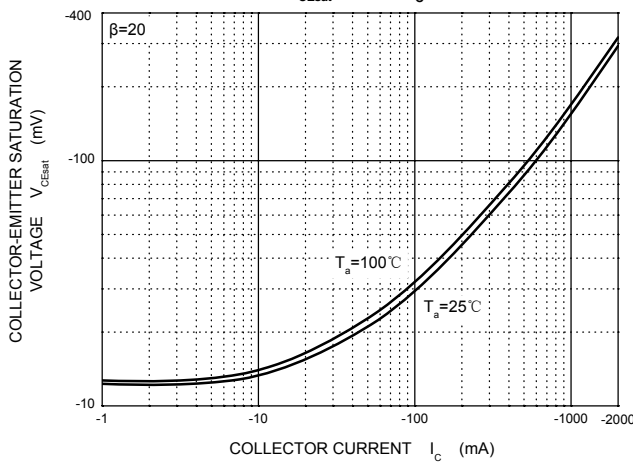
Static Characteristic



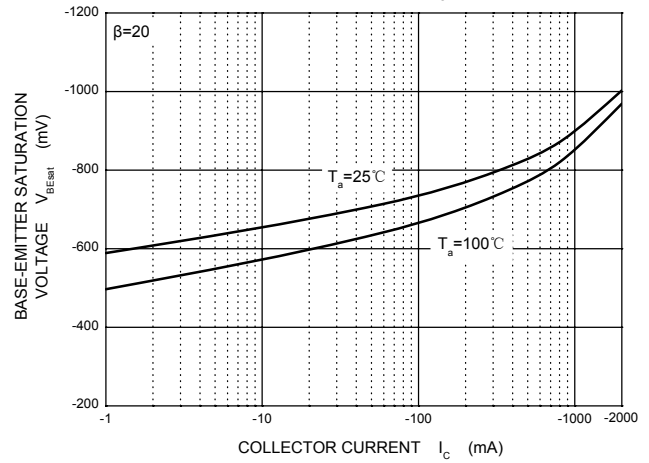
$h_{FE}$  —  $I_c$



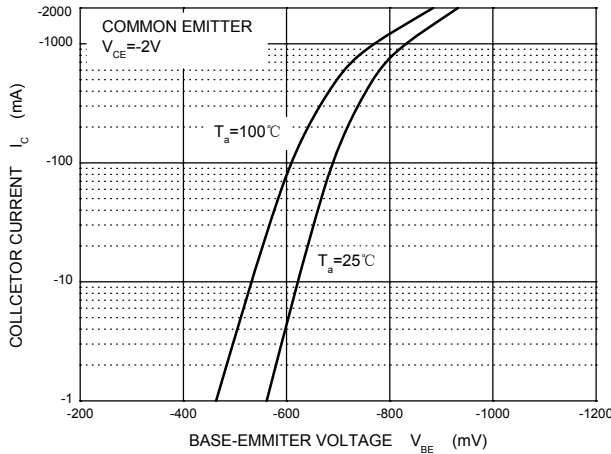
$V_{CEsat}$  —  $I_c$



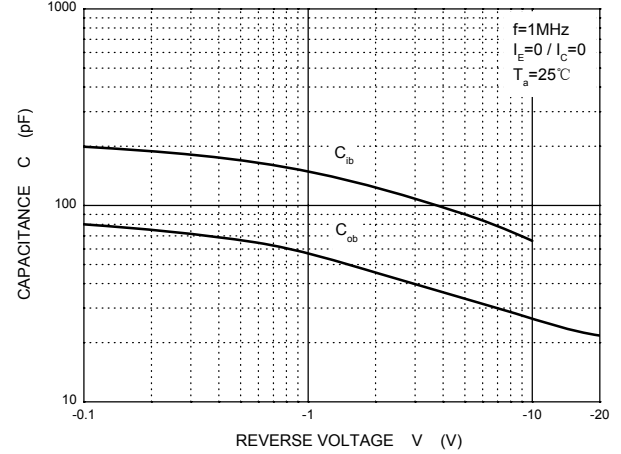
$V_{BEsat}$  —  $I_c$



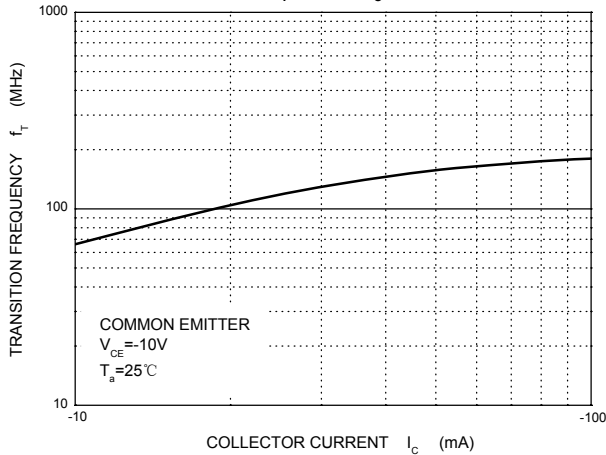
$I_c$  —  $V_{BE}$



$C_{ob}/C_{ib}$  —  $V_{CB}/V_{EB}$



$f_T$  —  $I_c$



$P_c$  —  $T_a$

