

## TRANSISTOR(PNP)

### FEATURES

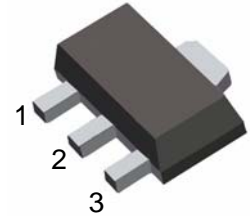
- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- For low-frequency output amplification
- Complementary to 2SD2185

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-50\text{V}, I_E=0$			-1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-1	$\mu\text{A}$
DC current gain	$h_{FE1}$	$V_{CE}=-2\text{V}, I_C=-200\text{mA}$	120		340	
	$h_{FE2}$	$V_{CE}=-2\text{V}, I_C=-1\text{A}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1\text{A}, I_B=-50\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-1\text{A}, I_B=-50\text{mA}$			-1..2	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=50\text{mA}, f=200\text{MHz}$		80		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			60	pF

### CLASSIFICATION OF $h_{FE1}$

Rank	R	S
Range	120-240	170-340
Marking	1L	

# Typical Characteristics

