

SOT-89-3L Plastic-Encapsulate Transistors

A92 TRANSISTOR (PNP)

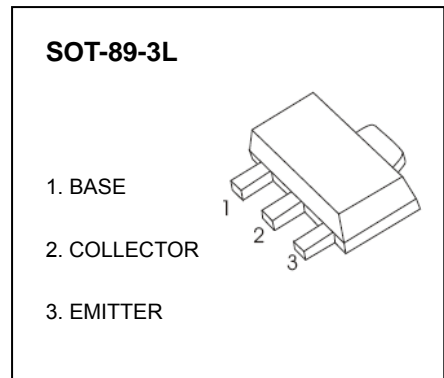
FEATURES

- Low Collector-Emitter Saturation Voltage
- High Breakdown Voltage

MARKING: A92

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-310	V
V_{CEO}	Collector-Emitter Voltage	-305	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current- Continuous	-200	mA
I_{CA}	Collector Current -Pulsed	-500	mA
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	$^\circ\text{C}/\text{W}$
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	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-310			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-305			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-200\text{V}, I_E=0$			-0.25	μA
	I_{CEO}	$V_{CE}=-200\text{V}, I_B=0$			-0.25	μA
		$V_{CE}=-300\text{V}, I_B=0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-10\text{V}, I_C=-1\text{mA}$	60			
	$h_{FE(2)}$	$V_{CE}=-10\text{V}, I_C=-10\text{mA}$	100		300	
	$h_{FE(3)}$	$V_{CE}=-10\text{V}, I_C=-80\text{mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-20\text{mA}, I_B=-2\text{mA}$			-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-20\text{mA}, I_B=-2\text{mA}$			-0.9	V
Transition frequency	f_T	$V_{CE}=-20\text{V}, I_C=-10\text{mA}, f=30\text{MHz}$	50			MHz