

TO-92 Plastic-Encapsulate Transistors

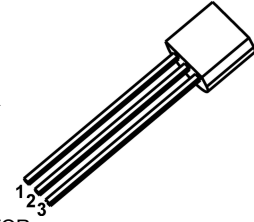
SS8550 TRANSISTOR (PNP)

FEATURES

- Power dissipation
 $P_C : 1\text{ W}$ ($T_a=25^\circ\text{C}$)

TO-92

1. EMITTER
2. BASE
3. COLLECTOR



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	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
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	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$, $I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-0.1\text{mA}$, $I_B=0$	-25			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}	$V_{CB}=-40\text{V}$, $I_E=0$			-0.1	μA
Emitter cut-off current	I_{CEO}	$V_{CE}=-20\text{V}$, $I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$	85		400	
	$h_{FE(2)}$	$V_{CE}=-1\text{V}$, $I_C=-800\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-800\text{mA}$, $I_B=-80\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-800\text{mA}$, $I_B=-80\text{mA}$			-1.2	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE}=-1\text{V}$, $I_C=-10\text{mA}$			-1	V
Out capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0\text{mA}$, $f=1\text{MHz}$			20	pF
Transition frequency	f_T	$V_{CE}=-10\text{V}$, $I_C=-50\text{mA}$, $f=30\text{MHz}$	100			MHz

CLASSIFICATION OF $h_{FE(2)}$

Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

Static Characteristic

