



DONGGUAN NANJING ELECTRONICS LTD.,

## SOT-23 Plastic-Encapsulate Transistors

**SS8550** TRANSISTOR (PNP)

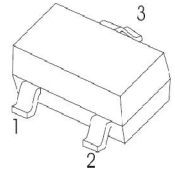
### FEATURES

- High Collector Current
- Complementary to SS8050

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

Symbol	Parameter	Value	Unit
$V_{CB0}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-1.5	A
$P_C$	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	$^\circ\text{C/W}$
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^\circ\text{C}$

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1. BASE
2. EMITTER
3. COLLECTOR

### 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	$I_{CBO}$	$V_{CB}=-40\text{V}$ , $I_E=0$			-100	nA
Collector cut-off current	$I_{CEO}$	$V_{CE}=-20\text{V}$ , $I_B=0$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}$ , $I_C=0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}$ , $I_C=100\text{mA}$	120		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	$V_{BE}$	$V_{CE}=-1\text{V}$ , $I_C=10\text{mA}$			-1	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}$ , $I_C=50\text{mA}$ , $f=30\text{MHz}$	100			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$			20	pF

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

RANK	L	H	J
RANGE	120 - 200	200 - 350	300 - 400
MARKING	Y2		

# Typical Characteristics

# SS8550

