

#### **FEATURES**

Complimentary to S8050

MARKING: 2TY

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

Parameter	Symbol	Value	Unit	
Collector-Base Voltage	$V_{CBO}$	-40	V	
Collector-Emitter Voltage	V <sub>CEO</sub>	-25	V	
Emitter-Base Voltage	$V_{EBO}$	-5	V	
Collector Current -Continuous	$I_{C}$	-0.5	A	
Collector Power Dissipation	P <sub>C</sub>	0.3	W	
Junction Temperature	T <sub>J</sub>	150	$^{\circ}$	
Storage Temperature	Tstg	-55 to +150	$^{\circ}$	

# **S8550** (PNP)



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{CBO}$	$I_{C} = -100 \mu A, \qquad I_{E} = 0$	-40		V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	$I_C = -1 \text{ mA}, I_B = 0$	-20		V
Emitter-base breakdown voltage	$V_{\mathrm{EBO}}$	$I_{E}$ = -100 $\mu$ A, $I_{C}$ =0	-5		V
Collector cut-off current	I <sub>CBO</sub>	$V_{CB}$ = -40V, $I_{E}$ =0		-0.1	μΑ
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = -20V, I <sub>B</sub> =0		-0.1	μΑ
Emitter cut-off current	$I_{\mathrm{EBO}}$	V <sub>EB</sub> = -3V, I <sub>C</sub> =0		-0.1	μΑ
	h <sub>FE(1)</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -50mA	120	400	
DC current gain	$h_{FE(2)}$ $V_{CE}=-1V$ ,	V <sub>CE</sub> = -1V, I <sub>C</sub> = -500mA	5		
Collector-emitter saturation voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =-500mA, I <sub>B</sub> = -50mA		-0.6	V
Base-emitter saturation voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =-500mA, I <sub>B</sub> = -50mA		-1.2	V
Transition frequency	$f_{T}$	V <sub>CE</sub> = -6V, I <sub>C</sub> = -20mA f=30MHz	150		MHz

## CLASSIFICATION OF $h_{FE}$

Rank	L	Н	
Range	120-200	200-350	





### **\$8550** Typical Characteristics







