

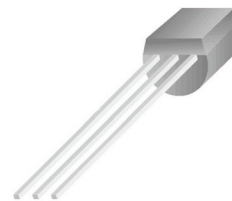
SS8550

LEC

General Purpose Transistors PNP

RoHS Device

Halogen Free



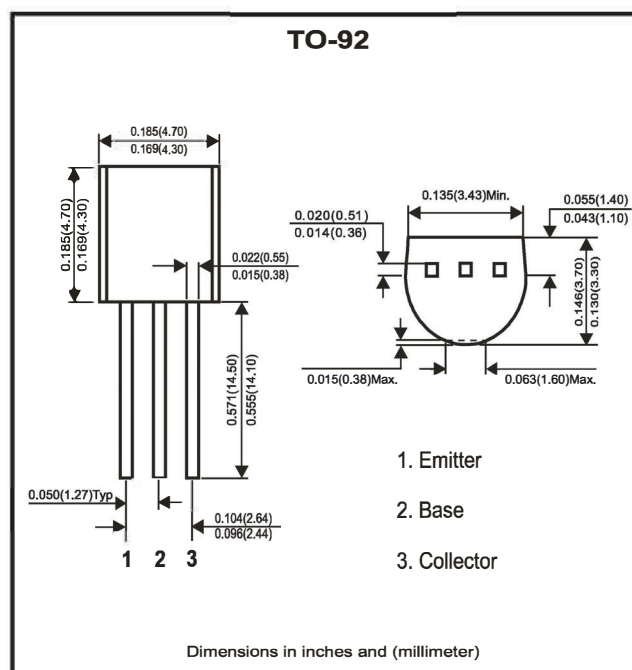
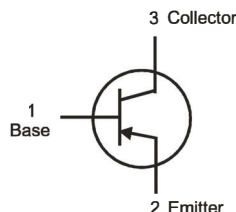
Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- Surface mount package ideally suited for automatic insertion.

Mechanical data

- Case: TO-92, molded plastic.

Circuit Diagram



Maximum Ratings (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base voltage	V_{CBO}	-40	V
Collector-Emitter voltage	V_{CEO}	-25	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current-Continuous	I_C	-1.5	A
Collector power dissipation	P_D	1000	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	125	$^{\circ}\text{C/W}$
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

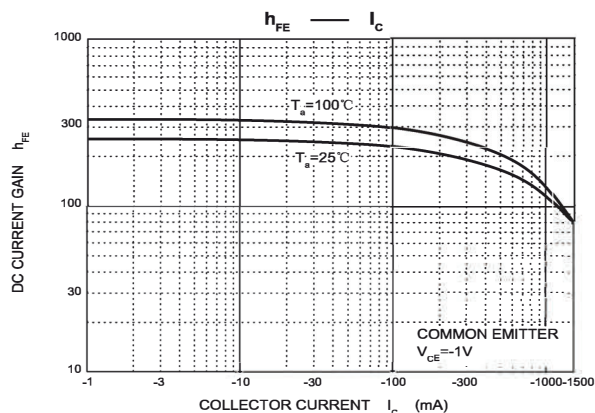
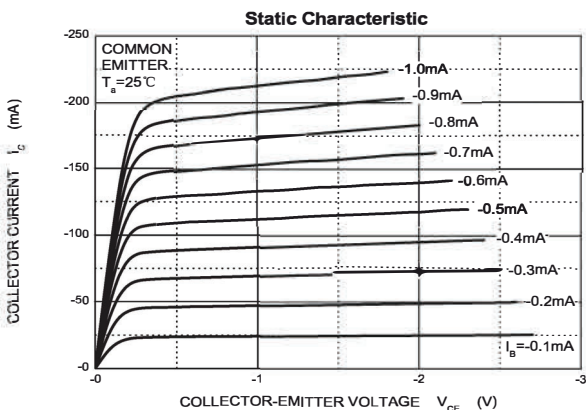
Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$, $I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -100\mu\text{A}$, $I_B = 0$	-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	$h_{FE(1)}$	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	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
Small-signal characteristics					
Transition frequency	f_T	$V_{CE} = -10\text{Vdc}$, $I_C = -50\text{mA}$, $f = 30\text{MHz}$	100		MHz

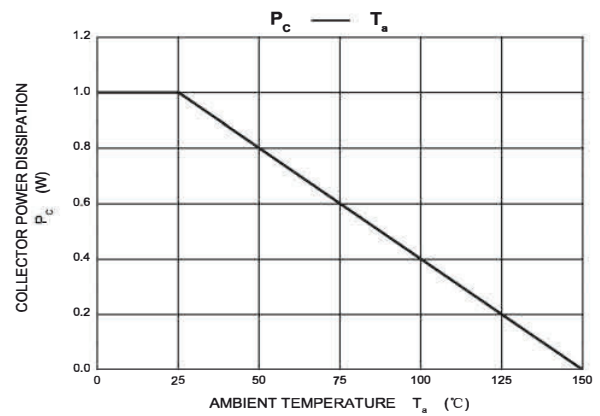
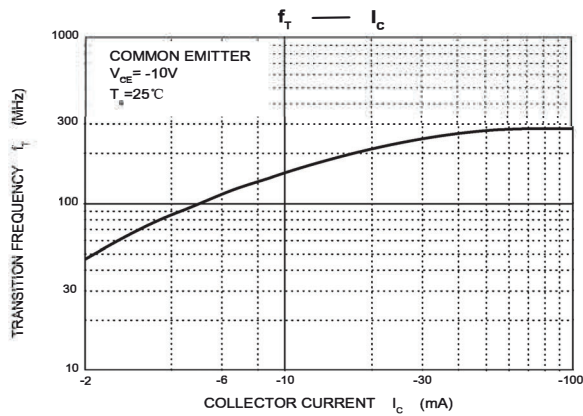
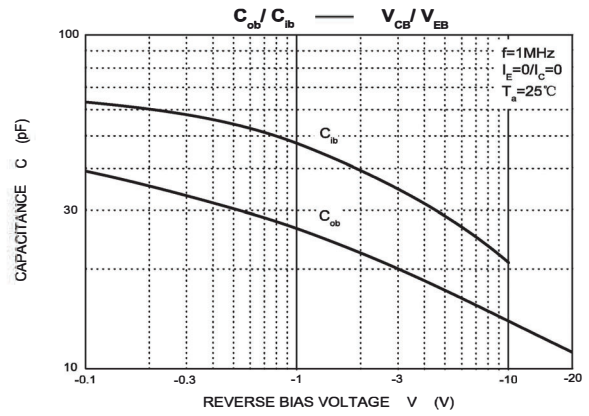
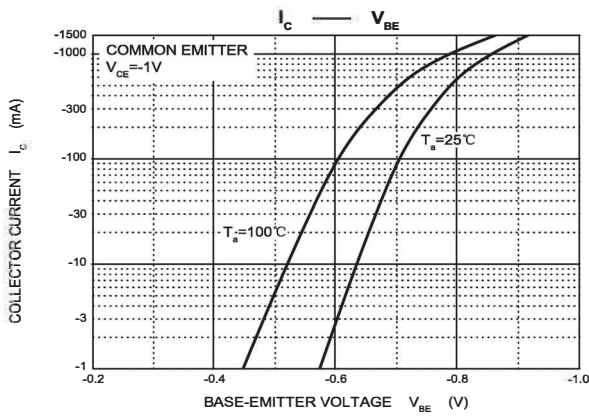
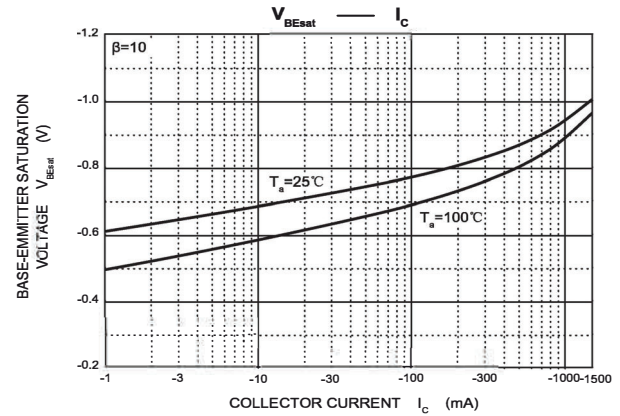
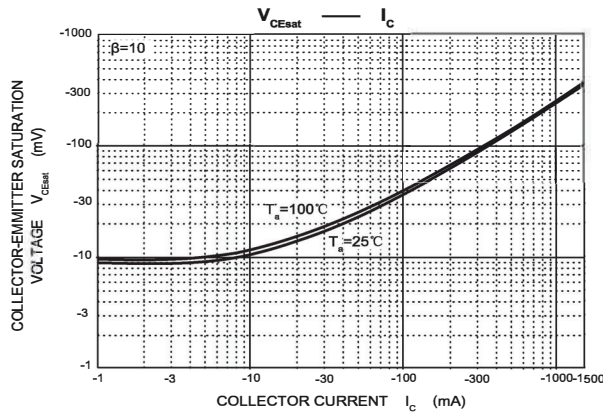
Classification of h_{FE} (1)

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

Rating and Characteristic Curves

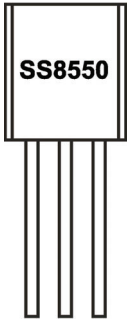


Rating and Characteristic Curves



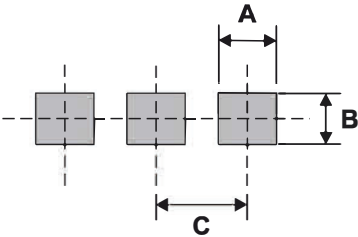
Marking Code

Part Number	Marking Code
SS8550	SS8550



Suggested PAD Layout

SIZE	TO-92	
	(mm)	(inch)
A	0.80	0.031
B	0.70	0.028
C	1.27	0.050



Notes: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	BULK PACK
	BAG (pcs)
TO-92	1,000