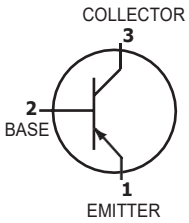
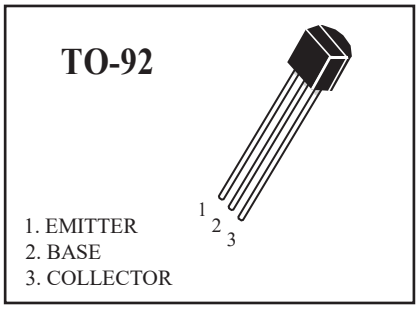
Plastic-Encapsulate Transistors

PNP Silicon

Lead(Pb)-Free





ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	SS8550	Unit
Collector-Emitter Voltage	V_{CEO}	-25	Vdc
Collector-Base Voltage	V_{CBO}	-40	Vdc
Emitter-Base Voltage	V_{EBO}	-5.0	Vdc
Collector Current	I_C	-1.5	Adc
Total Device Dissipation T_A=25 °C	P_D	1.0	W
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-55 to +150	°C

DEVICE MARKING

SS8550=SS8550D

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage(1) (I_C= -0.1 mAdc, I_B=0)	$V_{(BR)CEO}$	-25	-	Vdc
Collector-Base Breakdown Voltage (I_C= -100 uAdc, I_E=0)	$V_{(BR)CBO}$	-40	-	Vdc
Emitter-Base Breakdown Voltage (I_E= -100 uAdc, I_C=0)	$V_{(BR)EBO}$	-5.0	-	Vdc
Collector Cutoff Current (V_{CB}= -40 Vdc, I_E=0 Vdc)	I_{CBO}	-	-0.1	uAdc
Emitter Cutoff Current(V_{EB} = -5 Vdc, I_C =0 Vdc)	I_{EBO}	-	-0.1	uAdc

1. Pulse Test: Pulse Width ≤ 300 us, Duty Cycle ≤2.0%

ELECTRICAL CHARACTERISTICS(T_A=25 unless otherwise noted) (Countinued)

Characteristics	Symbol	Min	TYP	Max	Unit
DC Current Gain (I_C= -100 mAdc, V_{CE}=-1.0 Vdc)	$h_{FE(1)}$	85	-	400	-
DC Current Gain (I_C= -800 mAdc, V_{CE}= -1.0 Vdc)	$h_{FE(2)}$	40	-	-	-
Collector-Emitter Saturation Voltage (I_C= -800 mAdc, I_B= -80 mAdc)	$V_{CE(sat)}$	-	-	-0.5	Vdc
Base-Emitter Saturation Voltage (I_C= -800 mAdc, I_B= -80 mAdc)	$V_{BE(sat)}$	-	-	-1.2	Vdc
Transition Frequency (V_{CE} =-10V, I_C =-50mA, f=30 MHz)	f_T	100	-	-	MHz

Classification of $h_{FE(1)}$

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

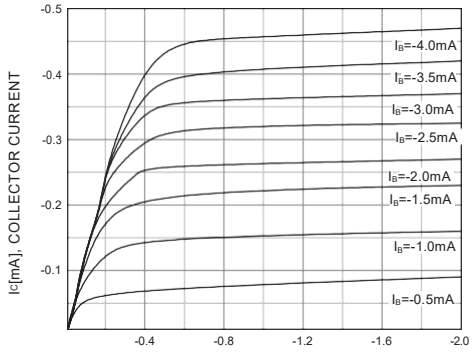


FIG.1 Static Characteristic

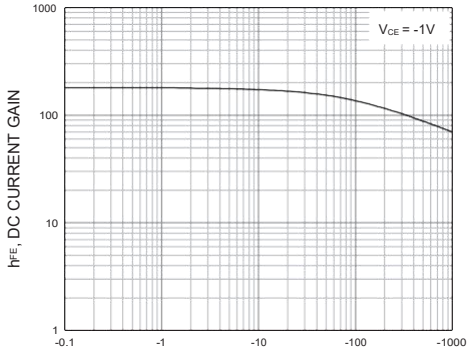


FIG.2 DC Current Gain

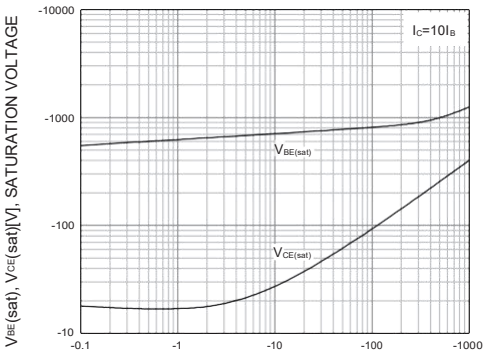


FIG.3 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

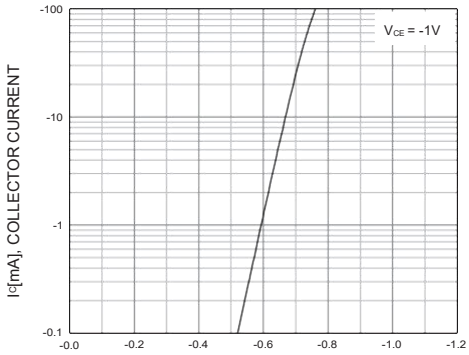


FIG.4 Base-Emitter On Voltage

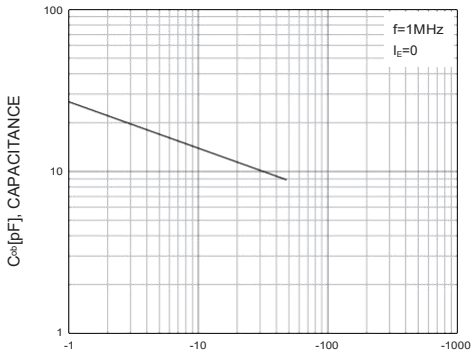


FIG.5 Collector Output Capacitance

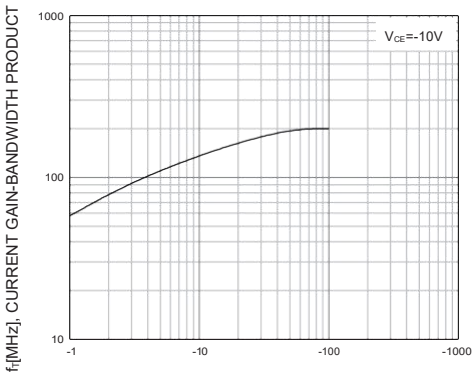
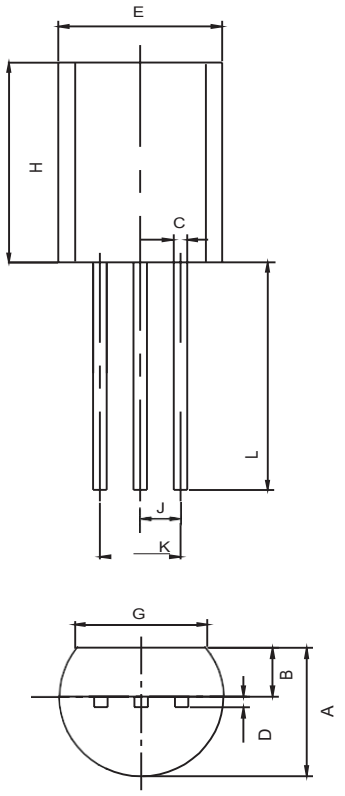


FIG.6 Current Gain Bandwidth Product

TO-92 Outline Dimensions

unit:mm



TO-92		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.10	1.40
C	0.38	0.55
D	0.36	0.51
E	4.40	4.70
G	3.43	-
H	4.30	4.70
J	1.270TYP	
K	2.44	2.64
L	14.10	14.50