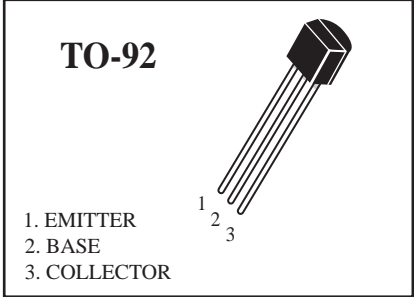
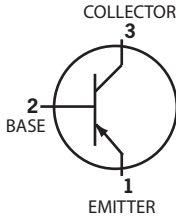


# PNP Silicon Plastic-Encapsulate Transistors

**(Pb)** Lead(Pb)-Free



### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	SS8550	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	-25	Vdc
Collector-Base Voltage	V <sub>CBO</sub>	-40	Vdc
Emitter-Base Voltage	V <sub>EBO</sub>	-5.0	Vdc
Collector Current	I <sub>C</sub>	-1.5	Adc
Total Device Dissipation T <sub>A</sub> =25°C	P <sub>D</sub>	1.0	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage <sup>(1)</sup> (I <sub>C</sub> = -0.1 mA, I <sub>B</sub> =0)	V <sub>(BR)CEO</sub>	-25	-	Vdc
Collector-Base Breakdown Voltage (I <sub>C</sub> = -100 uA, I <sub>E</sub> =0)	V <sub>(BR)CBO</sub>	-40	-	Vdc
Emitter-Base Breakdown Voltage (I <sub>E</sub> = -100 uA, I <sub>C</sub> =0)	V <sub>(BR)EBO</sub>	-5.0	-	Vdc
Collector Cutoff Current (V <sub>CB</sub> = -40 Vdc, I <sub>E</sub> =0 Vdc)	I <sub>CBO</sub>	-	-0.1	uAdc
Emitter Cutoff Current (V <sub>EB</sub> = -5 Vdc, I <sub>C</sub> =0 Vdc)	I <sub>EBO</sub>	-	-0.1	uAdc

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

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted) (Continued)

Characteristics	Symbol	Min	TYP	Max	Unit
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**ON CHARACTERISTICS**

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

**Classification of  $h_{FE(1)}$** 

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

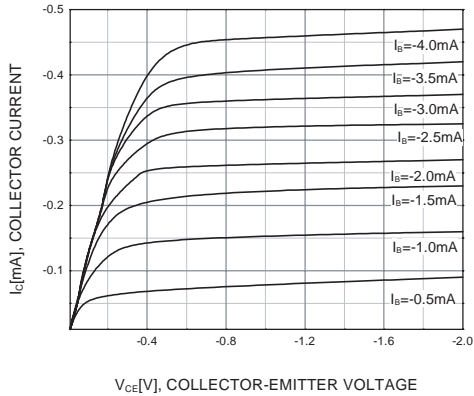


FIG.1 Static Characteristic

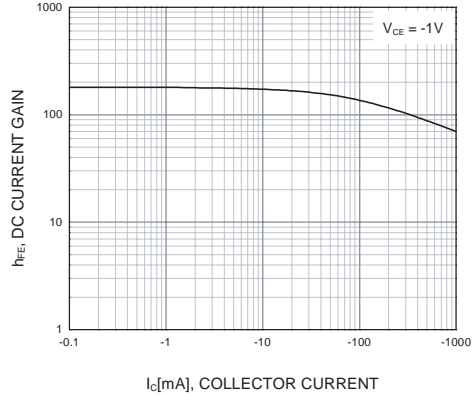


FIG.2 DC Current Gain

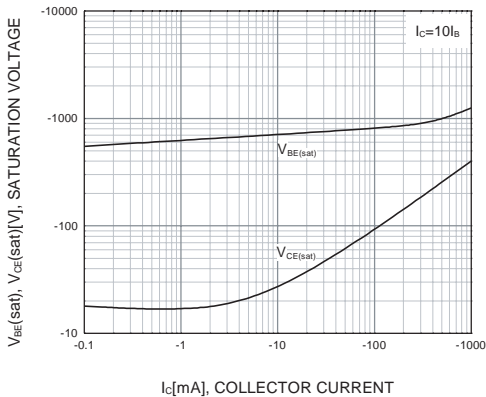


FIG.3 Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

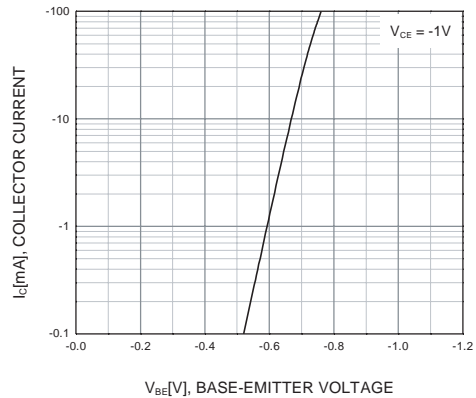


FIG.4 Base-Emitter On Voltage

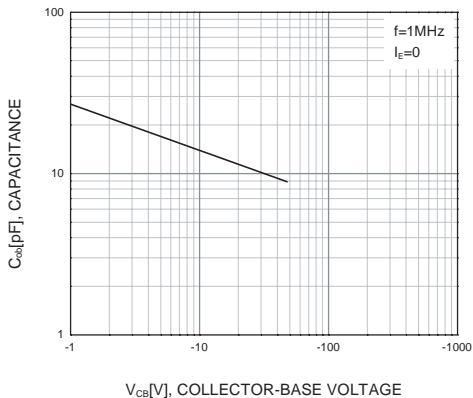


FIG.5 Collector Output Capacitance

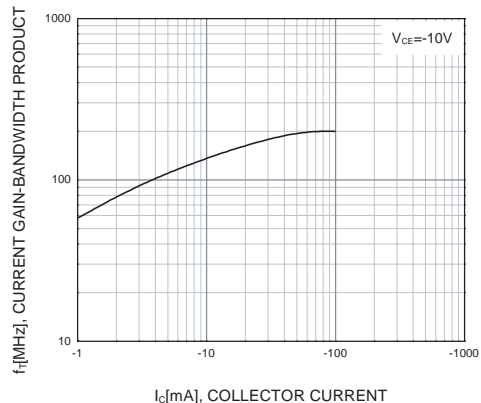
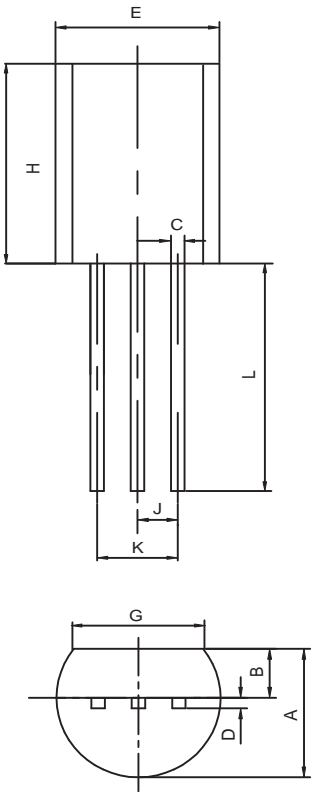


FIG.6 Current Gain Bandwidth Product

**TO-92 Outline Dimensions**

unit:mm



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