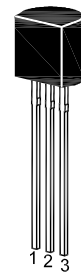


# 8550

## PNP Silicon Epitaxial Planar Transistor

for switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.

The transistor is subdivided into four groups, B, C, D and E, according to its DC current gain.



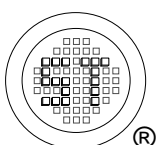
1. Emitter 2. Base 3. Collector  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	40	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	25	V
Emitter Base Voltage	$-V_{\text{EBO}}$	6	V
Collector Current	$-I_{\text{C}}$	800	mA
Base Current	$-I_{\text{B}}$	100	mA
Power Dissipation	$P_{\text{tot}}$	625	mW
Junction Temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

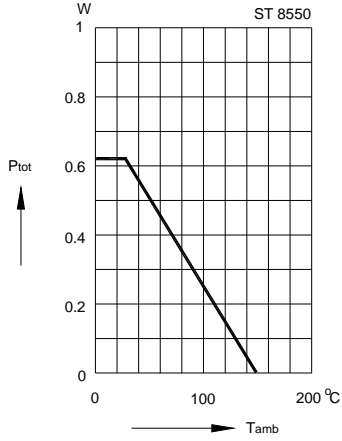
Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 100 \text{ mA}$  at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 350 \text{ mA}$	Current Gain Group B	$h_{\text{FE}}$	70	-	120	-
	C	$h_{\text{FE}}$	120	-	200	-
	D	$h_{\text{FE}}$	160	-	300	-
	E	$h_{\text{FE}}$	300	-	380	-
		$h_{\text{FE}}$	60	-	-	-
Collector Base Cutoff Current at $-V_{\text{CB}} = 35 \text{ V}$	$-I_{\text{CBO}}$	-	-	100	nA	
Collector Base Breakdown Voltage at $-I_{\text{C}} = 10 \mu\text{A}$	$-V_{(\text{BR})\text{CBO}}$	40	-	-	V	
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 2 \text{ mA}$	$-V_{(\text{BR})\text{CEO}}$	25	-	-	V	
Emitter Base Breakdown Voltage at $-I_{\text{E}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{EBO}}$	6	-	-	V	
Collector Emitter Saturation Voltage at $-I_{\text{C}} = 500 \text{ mA}$ , $-I_{\text{B}} = 50 \text{ mA}$	$-V_{\text{CE}(\text{sat})}$	-	-	0.5	V	
Base Emitter Saturation Voltage at $-I_{\text{C}} = 500 \text{ mA}$ , $-I_{\text{B}} = 50 \text{ mA}$	$-V_{\text{BE}(\text{sat})}$	-	-	1.2	V	
Gain Bandwidth Product at $-V_{\text{CE}} = 5 \text{ V}$ , $-I_{\text{C}} = 10 \text{ mA}$ , $f = 50 \text{ MHz}$	$f_{\text{T}}$	-	100	-	MHz	
Collector Base Capacitance at $-V_{\text{CB}} = 10 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{\text{ob}}$	-	12	-	pF	



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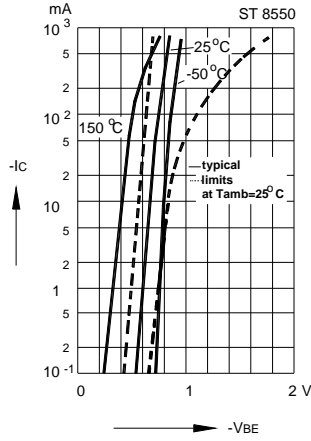


**Admissible power dissipation versus ambient temperature**  
Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case



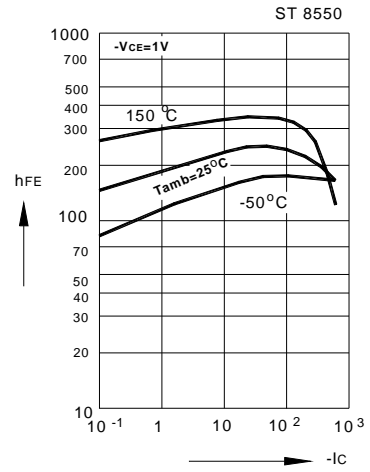
**Common emitter collector characteristics**

**Collector current versus base emitter voltage**

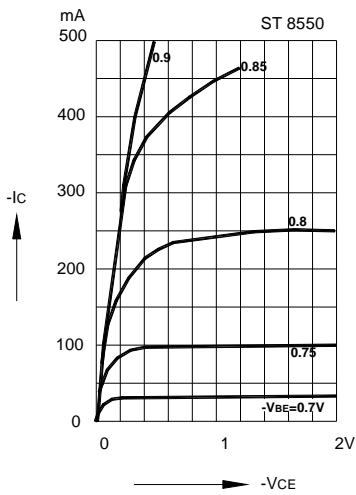


**Common emitter collector characteristics**

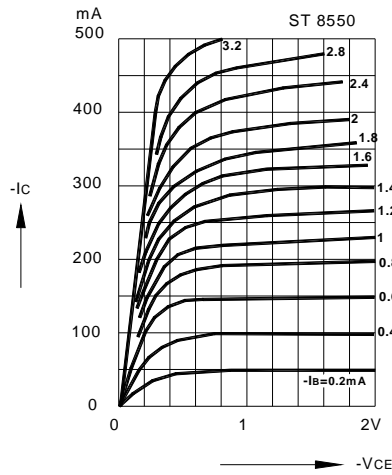
**DC current gain versus collector current**



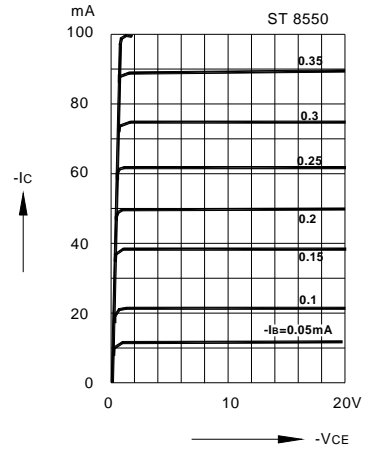
**Common emitter collector characteristics**



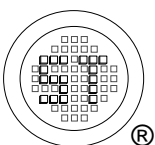
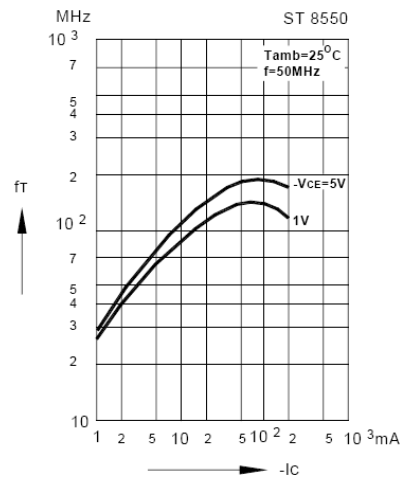
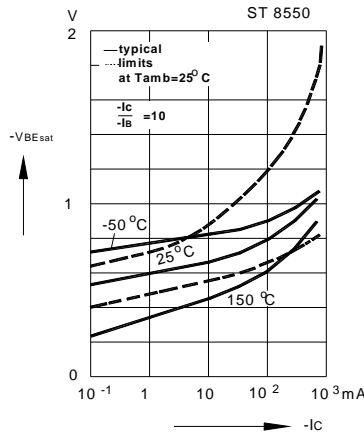
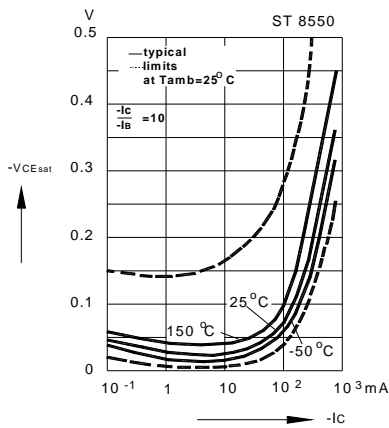
**Collector saturation voltage versus collector current**



**Base saturation voltage versus collector current**



**Common emitter collector characteristics**



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