

## MMBT8550 PNP Silicon Epitaxial Planar Transistor

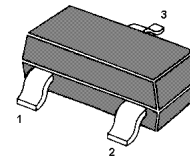
for switching and amplifier applications.  
Especially suitable for AF-driver stages  
and low power output stages.

The transistor is subdivided into two groups  
C And D according to its DC current gain.

### FEATURES

Complimentary to MMBT8050

Collector Current:  $I_C=2.0A$



1.Base 2.Emitter 3.Collector  
SOT-23 Plastic Package

### MARKING

MMBT8550C:A9D

MMBT8550D:B9D

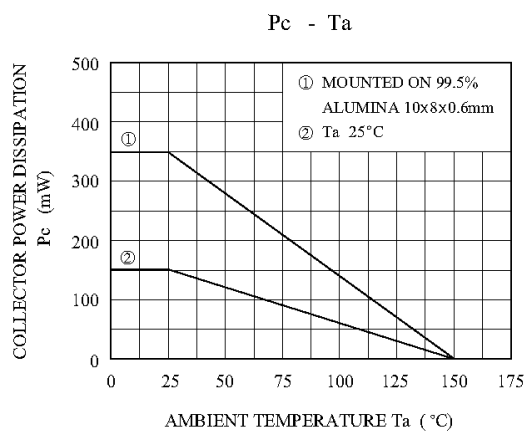
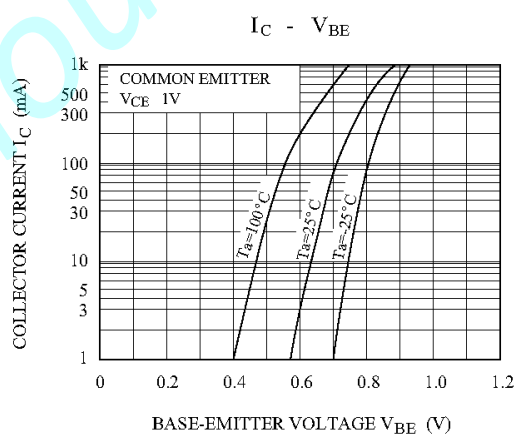
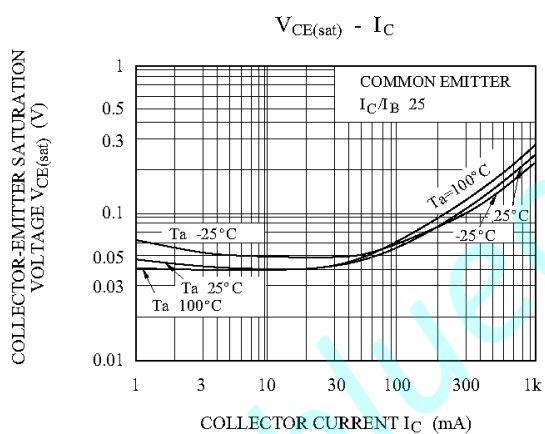
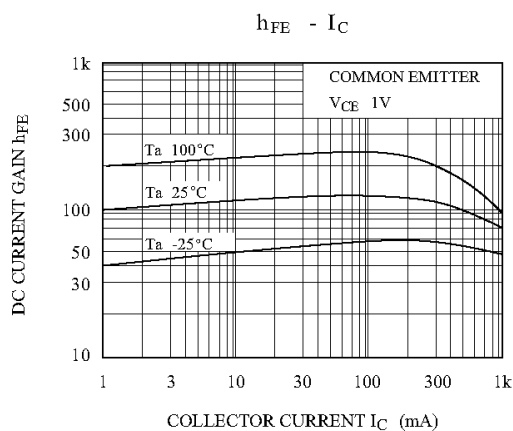
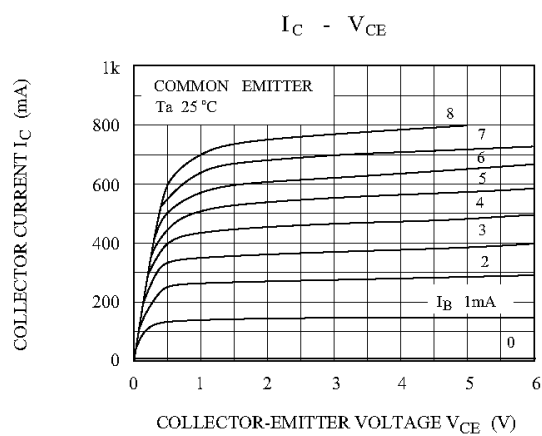
### Absolute Maximum Ratings ( $T_a = 25^\circ C$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	2	A
Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ C$

### Characteristics at $T_a = 25^\circ C$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 1 V, -I_C = 5 mA$ at $-V_{CE} = 1 V, -I_C = 100 mA$ at $-V_{CE} = 1 V, -I_C = 1.5 A$	$h_{FE}$	45	-	-
	$h_{FE}$	100	250	-
	$h_{FE}$	160	300	-
	$h_{FE}$	40	-	-
Collector Base Cutoff Current at $-V_{CB} = 35 V$	$-I_{CBO}$	-	100	nA
Emitter Base Cutoff Current at $-V_{EB} = 6 V$	$-I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100 \mu A$	$-V_{(BR)CBO}$	40	-	V
Collector Emitter Breakdown Voltage at $-I_C = 2 mA$	$-V_{(BR)CEO}$	25	-	V
Emitter Base Breakdown Voltage at $-I_E = 100 \mu A$	$-V_{(BR)EBO}$	6	-	V
Collector Emitter Saturation Voltage at $-I_C = 1.5 A, -I_B = 100 mA$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage at $-I_C = 1.5 A, -I_B = 100 mA$	$-V_{BE(sat)}$	-	1.2	V
Base Emitter Voltage at $-V_{CE} = 1 V, -I_C = 10 mA$	$-V_{BE(on)}$	-	1	V
Transition Frequency at $-V_{CE} = 10 V, -I_C = 50 mA$	$f_T$	100	-	MHz

## Typical Characteristics



## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20