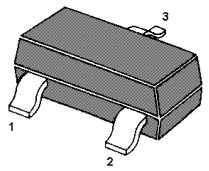
MMBT8550

PNP Silicon Epitaxial Planar Transistor

for switching and amplifier applications.

As complementary type the NPN transistor MMBT8050 is recommended.



1.BASE 2.EMITTER 3.COLLECTOR

SOT-23 Plastic Package

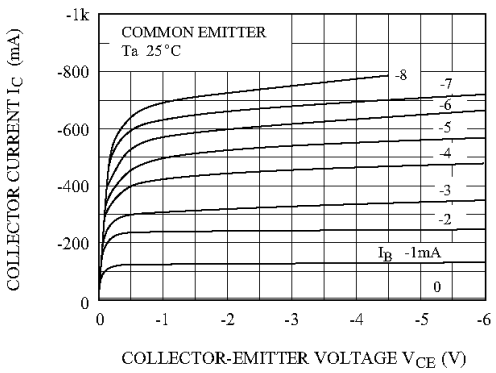
Absolute Maximum Ratings (T_a = 25 °C)

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	$-I_C$	600	mA
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{Stg}	- 55 to + 150	°C

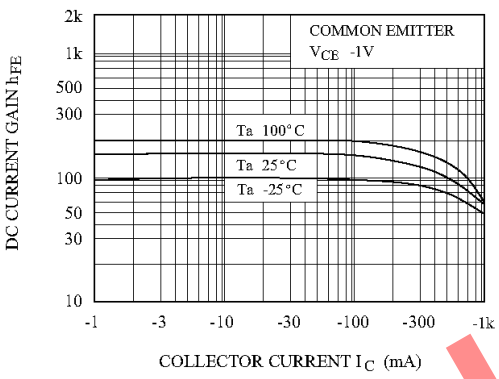
Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	MMBT8550C	h_{FE}	100	-	250	-
	MMBT8550D	h_{FE}	160	-	400	-
at $-V_{CE}$ = 1 V, $-I_C$ = 500 mA		h_{FE}	40	-	-	-
Collector Base Cutoff Current at $-V_{CB}$ = 35 V		$-I_{CBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C$ = 10 µA		$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 2 mA		$-V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 100 µA		$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 50 mA		$-V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 50 mA		$-V_{BE(sat)}$	-	-	1.2	V
Gain Bandwidth Product at $-V_{CE}$ = 5 V, $-I_C$ = 10 mA		f_T	-	100	-	MHz

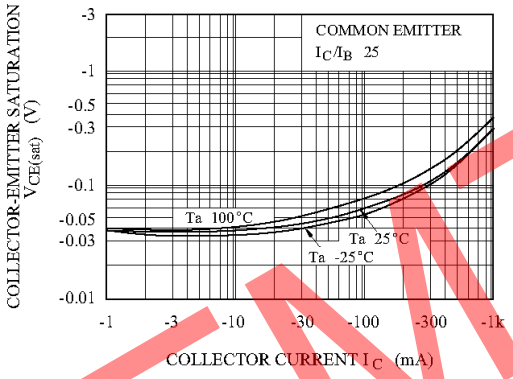
I_C - V_{CE}



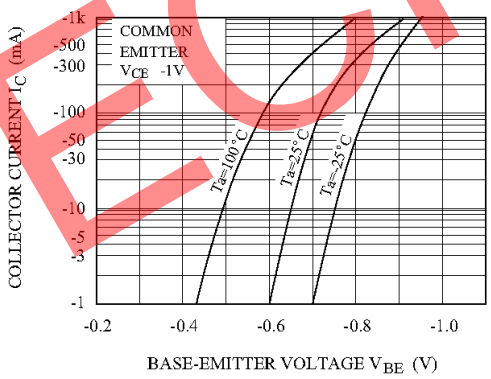
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



I_C - V_{BE}



Pc - Ta