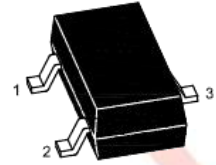


MMBT8550C/D

Features

- ◆ For switching and amplifier applications
- ◆ Especially suitable for AF-Driver stages and low power output stages
- ◆ As complementary type of the NPN transistor MMBT8050C/D is recommended

SOT-23
(TO-236)



1.Base 2.Emitter 3.Collector

Absolute maximum ratings (Ta=25°C unless otherwise noted)

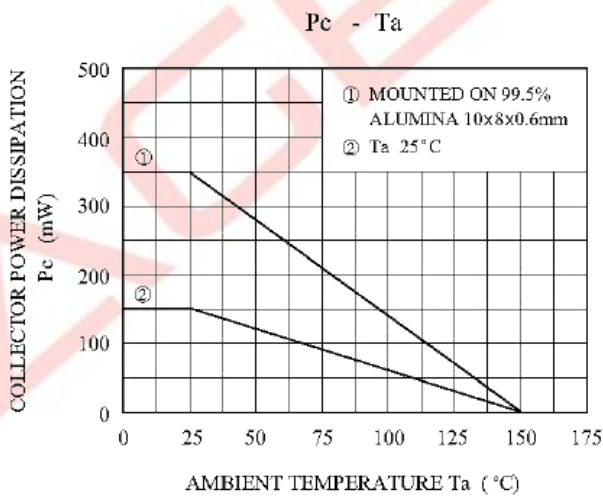
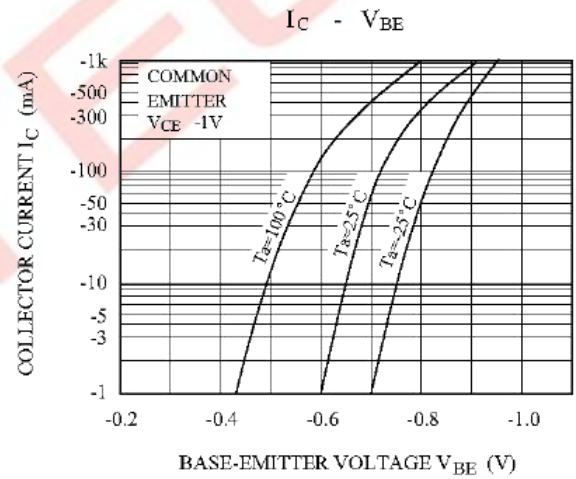
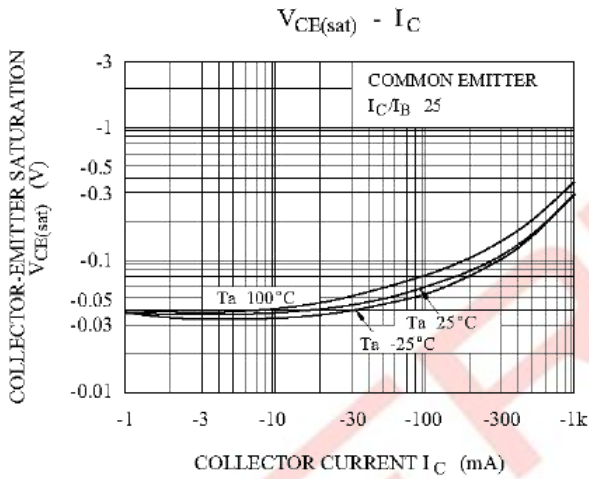
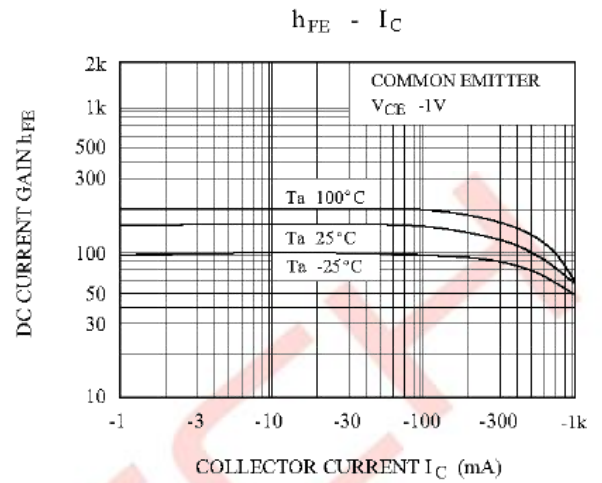
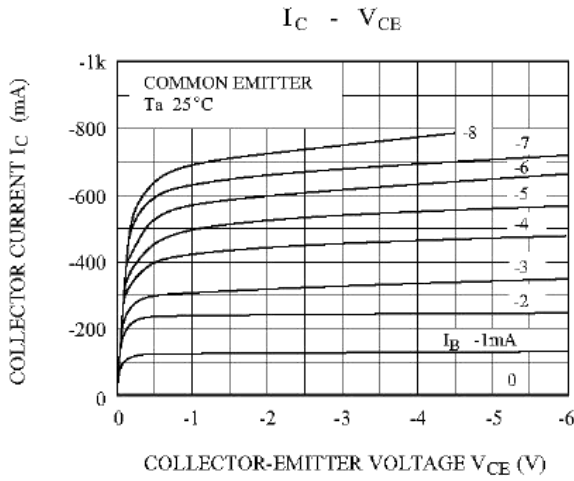
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	600	mA
Power Dissipation	P_D	350	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 TO 150	°C

Electrical characteristics (TA=25 °C, unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1V$, $-I_C=100mA$, Current Gain Group	C	100	-	250	
	D	160	-	400	
	H_{FE}	40	-	-	
Collector Base Cutoff Current at $-V_{CE}=1V$, $-I_C=550mA$	$-I_{CEO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C=10\mu A$	$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown voltage at $-I_C=2mA$	$-V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $-I_C=100\mu A$	$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $I_C=-500mA$, $I_B=50mA$	$-V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $I_C=500mA$, $I_B=50mA$	$-V_{BE(sat)}$	-	-	1.2	V
Transition Frequency at $-V_{CE}=5V$, $-I_C=10mA$	F_T	-	100	-	MHz

MMBT8550C/D

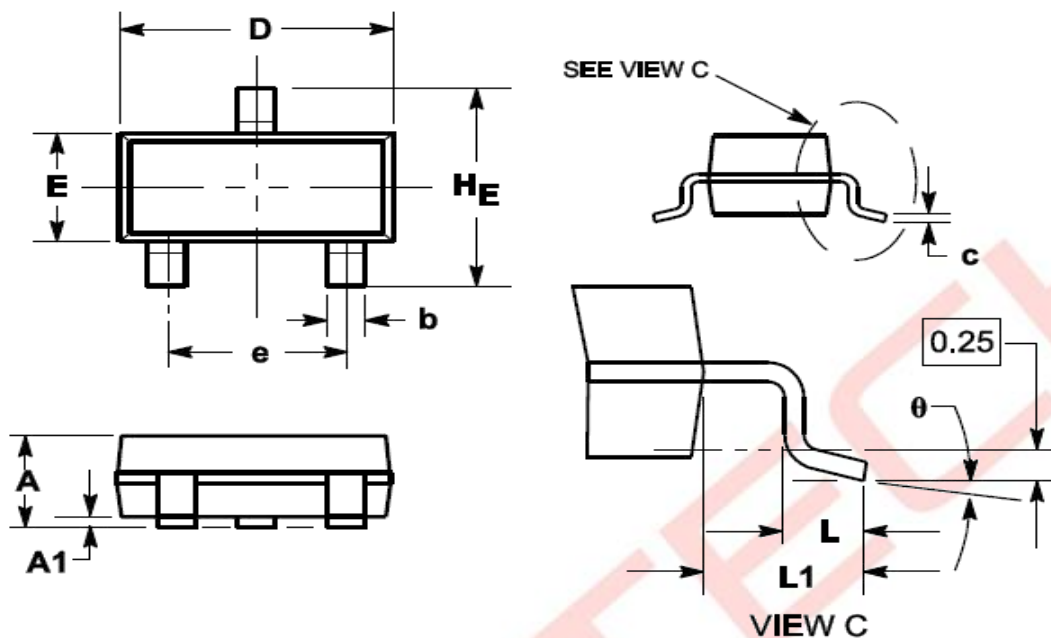
Typical Characteristics curves



MMBT8550C/D

Package Outline

SOT-23



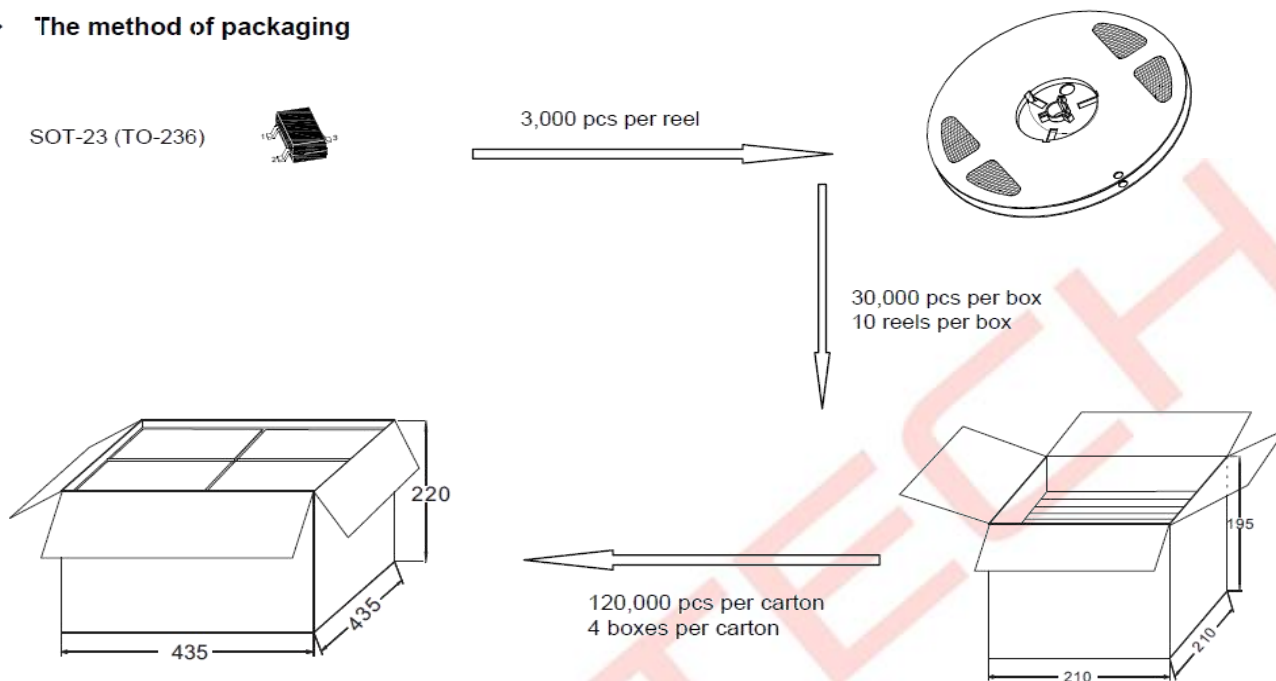
Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.900	1.025	1.150
A1	0.000	0.050	0.100
b	0.300	0.400	0.500
c	0.080	0.115	0.150
D	2.800	2.900	3.000
E	1.200	1.300	1.400
HE	2.250	2.400	2.500
e	1.800	1.900	2.000
L1	0.550REF		
L	0.300		0.500
θ	0°		8°

Device	Package	Reel Dimension(inch)	Shipping
MMBT8550C/D	SOT-23	7	3,000

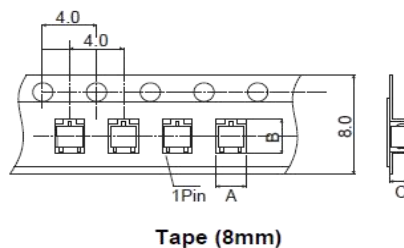
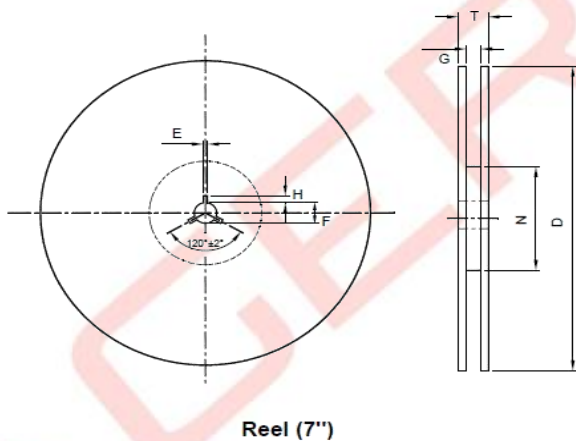
MMBT8550C/D

Package Specifications

◆ The method of packaging



◆ Embossed tape and reel data



Symbol	Value (unit: mm)
A	3.15 ± 0.1
B	2.7 ± 0.1
C	1.25 ± 0.1
E	2 ± 0.5
F	13 ± 0.5
D	178 ± 2.0
G	8.4 ± 1.5
H	4 ± 0.5
N	60
T	< 14.9