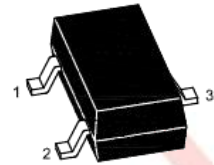


MMBT8050C/D(1.5A)

Features

- ◆ For switching and amplifier applications
- ◆ Especially suitable for AF-Driver stages and low power output stages

SOT-23
(TO-236)



1.Base 2.Emitter 3.Collector

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

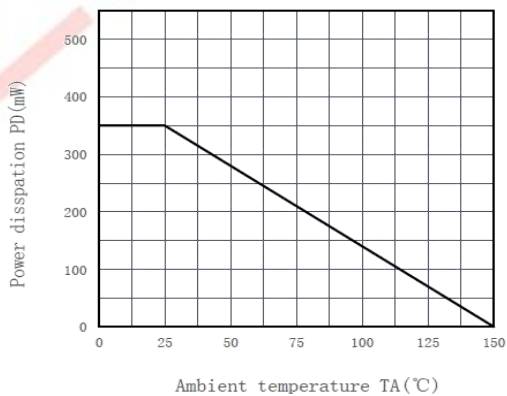
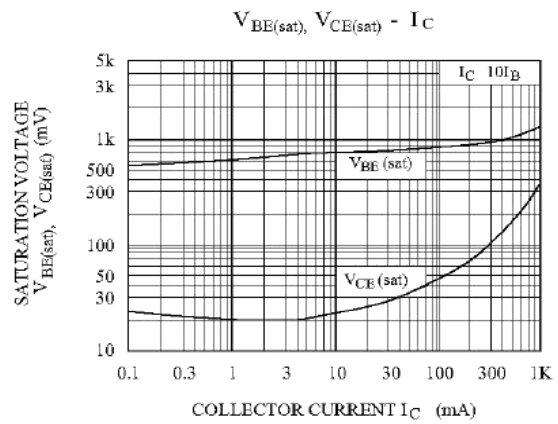
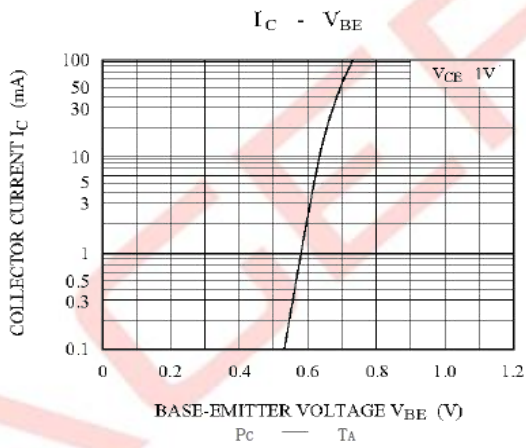
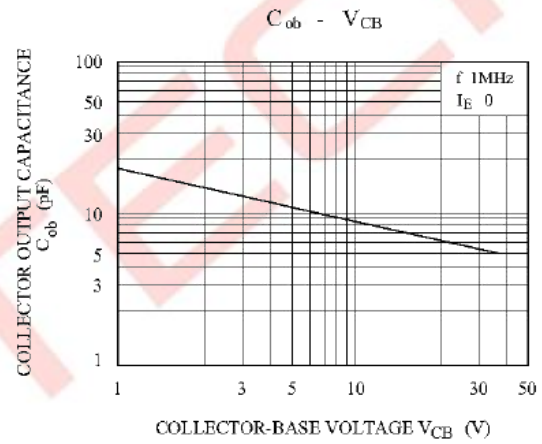
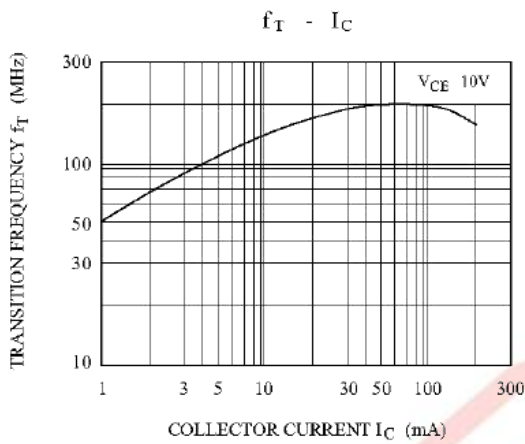
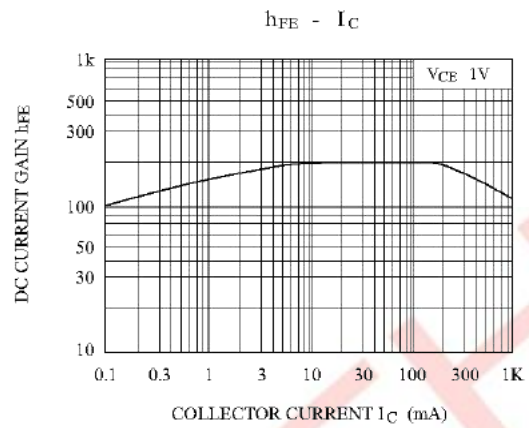
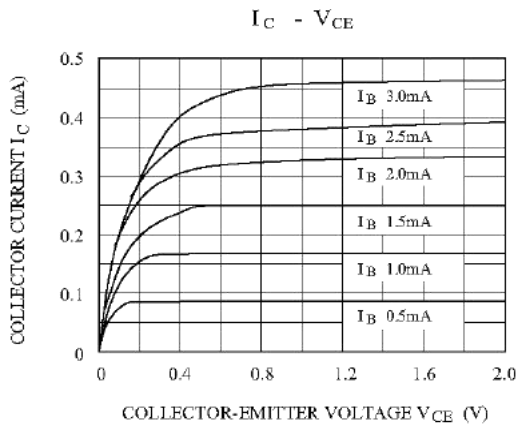
Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CB0}	40	V
Collector Emitter Voltage	V _{CEO}	25	V
Emitter Base Voltage	V _{EBO}	6	V
Collector Current	I _C	1.5	A
Power Dissipation	P _D	350	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 TO 150	°C

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 D H _{FE}	100	-	250	
		160	-	400	
		40			
Collector Base Cutoff Current at V _{CB} =35V	I _{CEO}	-	-	100	nA
Emitter Base Cutoff Current at V _{CB} =6V	I _{EBO}	-	-	100	nA
Collector Base Breakdown Voltage at I _C =100μA	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 =100μA	V _{(BR)EBO}	6	-	-	V
Collector Emitter Saturation Voltage at I _C =800mA, I _B =80mA	V _{CE(sat)}	-	-	0.5	V
Base Emitter Saturation Voltage at I _C =800mA, I _B =80mA	V _{BE(sat)}	-	-	1.2	V
Base Emitter Voltage at V _{CE} =1V, I _B =10mA	V _{BE(ON)}	-	-	1	
Transition Frequency at V _{CE} =10V, I _C =50mA	F _T	120	-	-	MHz

MMBT8050C/D(1.5A)

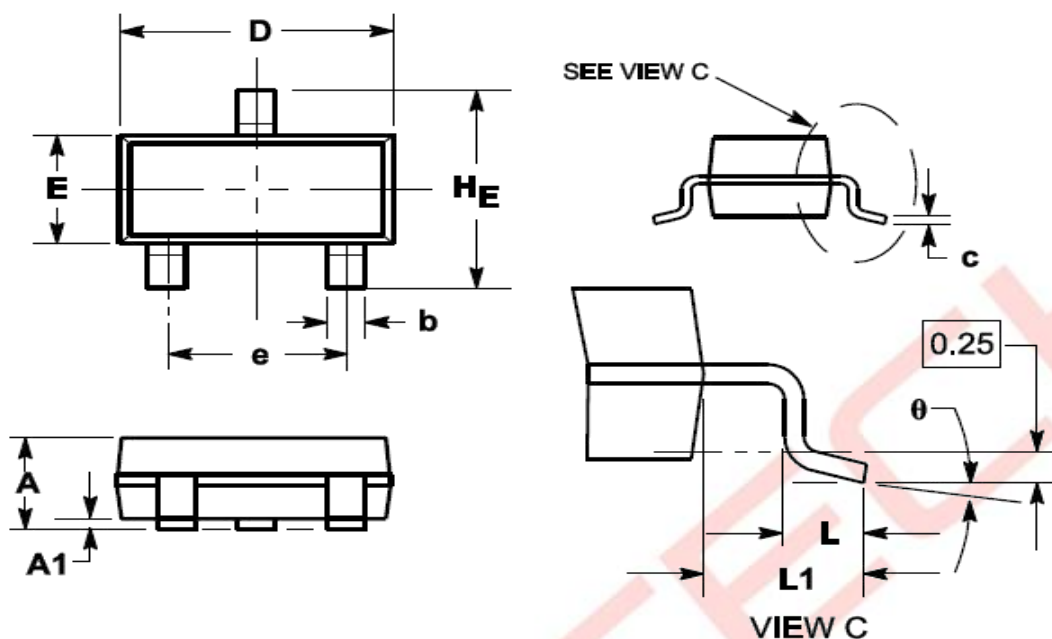
Typical Characteristics curves



MMBT8050C/D(1.5A)

Package Outline

SOT-23



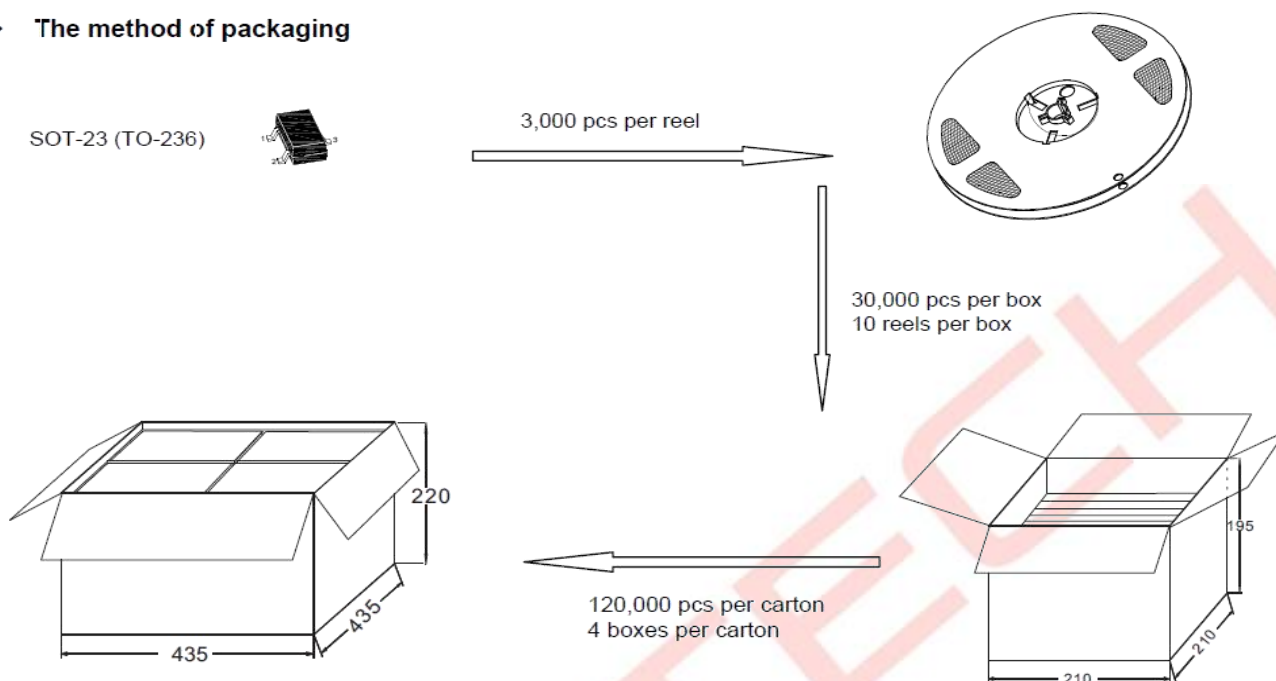
Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.900	1.025	1.150
A1	0.000	0.050	0.100
b	0.300	0.400	0.500
c	0.080	0.115	0.150
D	2.800	2.900	3.000
E	1.200	1.300	1.400
HE	2.250	2.400	2.500
e	1.800	1.900	2.000
L1	0.550REF		
L	0.300		0.500
θ	0°		8°

Device	Package	Reel Dimension(inch)	Shipping
MMBT8050C/D(1.5A)	SOT-23	7	3,000

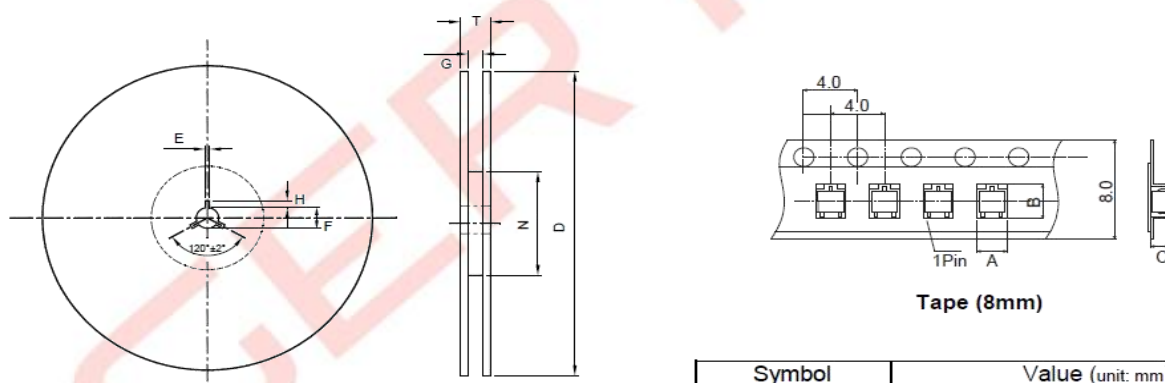
MMBT8050C/D(1.5A)

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