



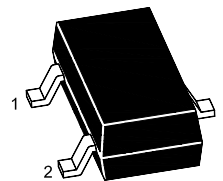
MMBT8550-1.5A

PNP Transistor

Features

- For Switching and Amplifier Applications.
- Especially Suitable for AF-Driver Stages and Low Power Output Stages.
- As Complementary Type of the NPN Transistor MMBT8050-1.5A is Recommended.

SOT-23
(TO-236)



1.Base 2.Emitter 3.Collector

Marking: -C: X2
-D: Y2

Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

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

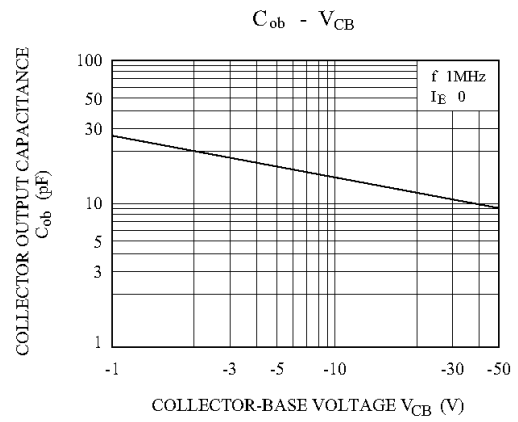
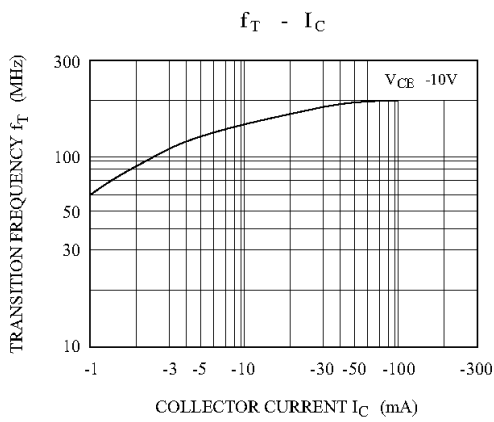
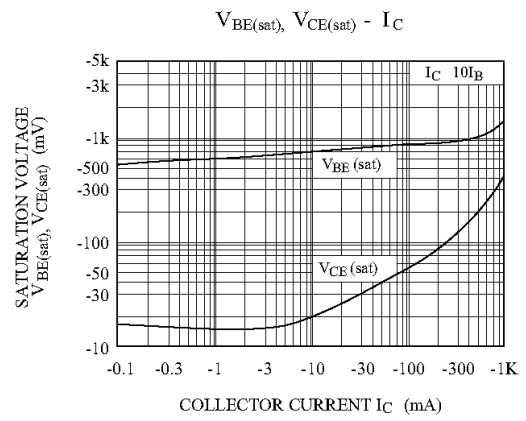
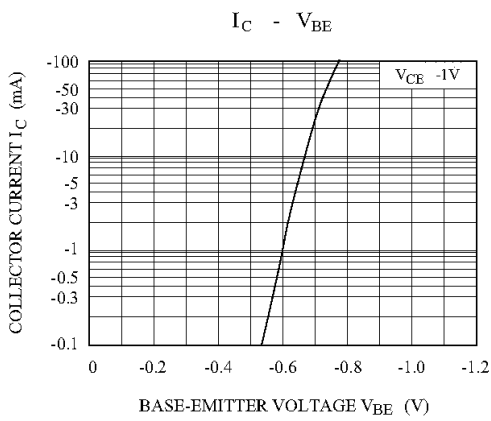
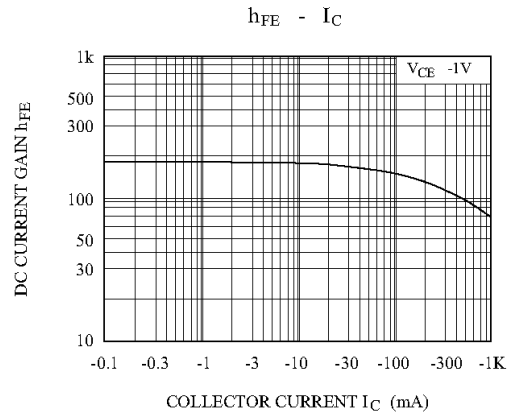
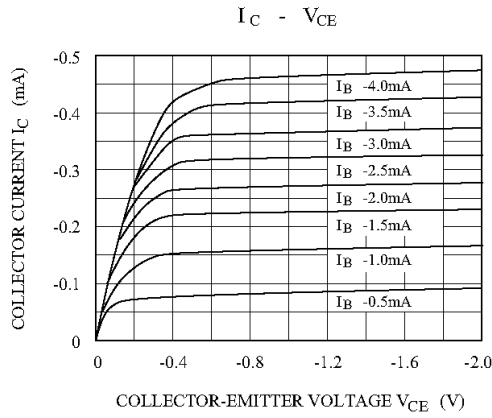
Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$ Current Gain Group	C D H_{FE}	100	-	250	
		160	-	400	
		at $-V_{CE} = 1\text{ V}$, $-I_C = 800\text{ mA}$	40	-	
Collector Base Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CB0}$	-	-	100	nA
Emitter Base Cutoff Current at $-V_{CB} = 6\text{ V}$	$-I_{EBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CB0}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C = 2\text{ mA}$	$-V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $-I_C = 800\text{ mA}$, $-I_B = 80\text{ mA}$	$-V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $-I_C = 800\text{ mA}$, $-I_B = 80\text{ mA}$	$-V_{BE(sat)}$	-	-	1.2	V
Base Emitter Voltage at $-V_{CE} = 1\text{ V}$, $-I_B = 10\text{ mA}$	$-V_{BE(on)}$	-	-	1	V
Transition Frequency at $-V_{CE} = 10\text{ V}$, $-I_C = 50\text{ mA}$	F_T	120	-	-	MHz

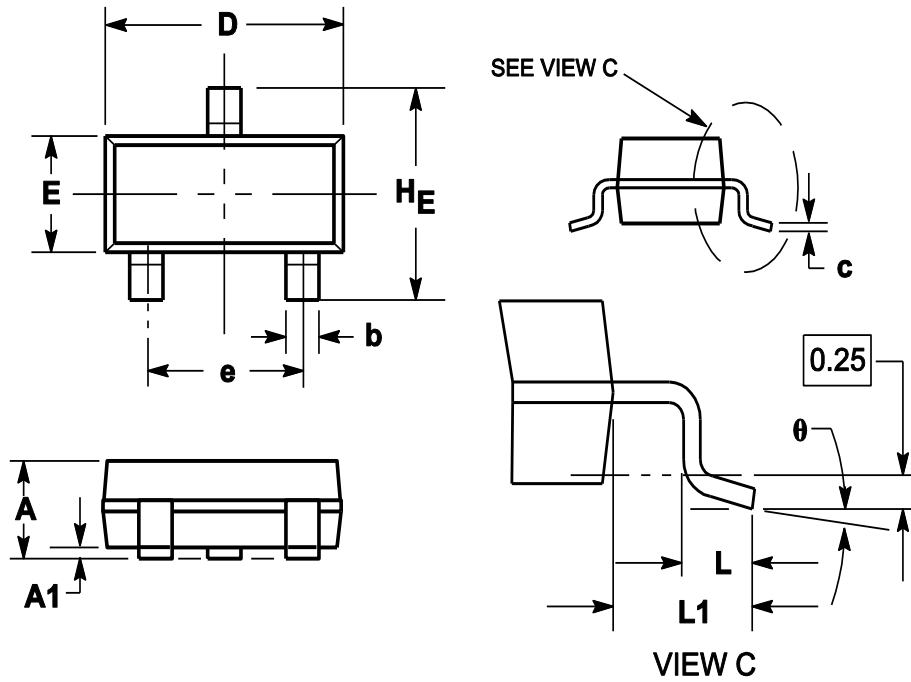


Electrical Characteristics Curves





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	2.550
e	1.800	1.900	2.000
L1	0.550REF		
L	0.300		0.500
θ	0°		8°

Ordering Information

Device	Package	Reel Dimension (inch)	Shipping
MMBT8550-1.5A	SOT-23	7	3,000