

# MMBT8550D

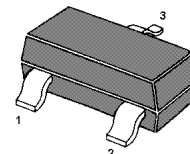
TRANSISTOR (PNP)



## FEATURES

Complimentary to MMBT8050

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

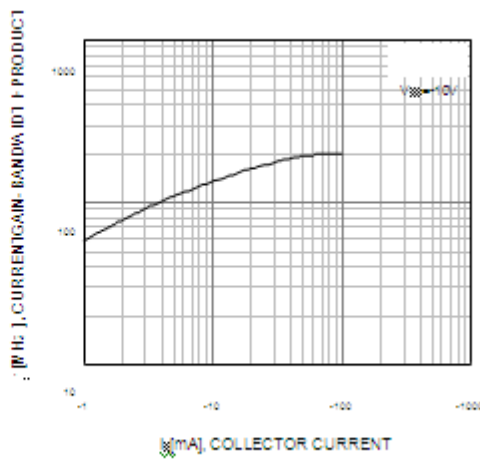
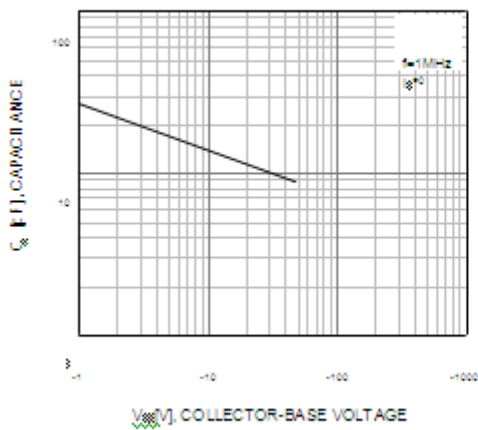
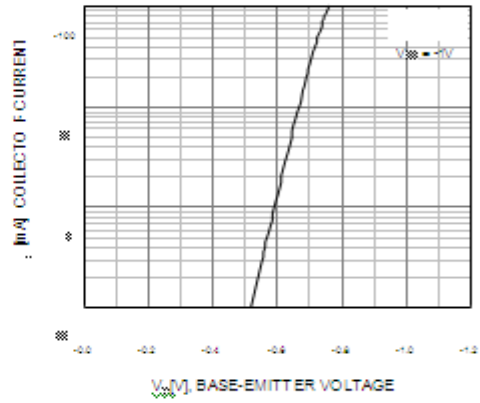
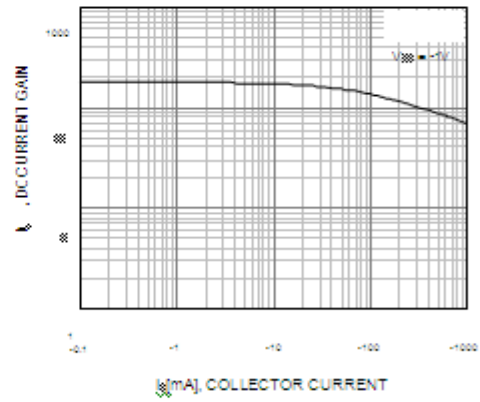
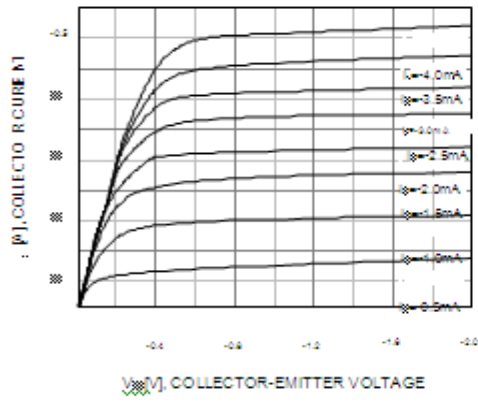
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-1.5	A
$P_C$	Collector Power Dissipation	0.3	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$ , $I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-0.1\text{mA}$ , $I_B=0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$ , $I_C=0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-40\text{V}$ , $I_E=0$		-0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE}=-20\text{V}$ , $I_B=0$		-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}$ , $I_C=0$		-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}$ , $I_C=-100\text{mA}$	200	350	
	$h_{FE(2)}$	$V_{CE}=-1\text{V}$ , $I_C=-800\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-800\text{mA}$ , $I_B=-80\text{mA}$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-800\text{mA}$ , $I_B=-80\text{mA}$		-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=-1\text{V}$ , $V_{CE}=-10\text{mA}$		-1	V
Base-emitter positive favor voltage	$V_{BEF}$	$I_B=-1\text{A}$		-1.55	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}$ , $I_C=-50\text{mA}$ $f=30\text{MHz}$	100		MHz
output capacitance	$C_{ob}$	$(V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz})$		20	pF

# Typical Characteristics

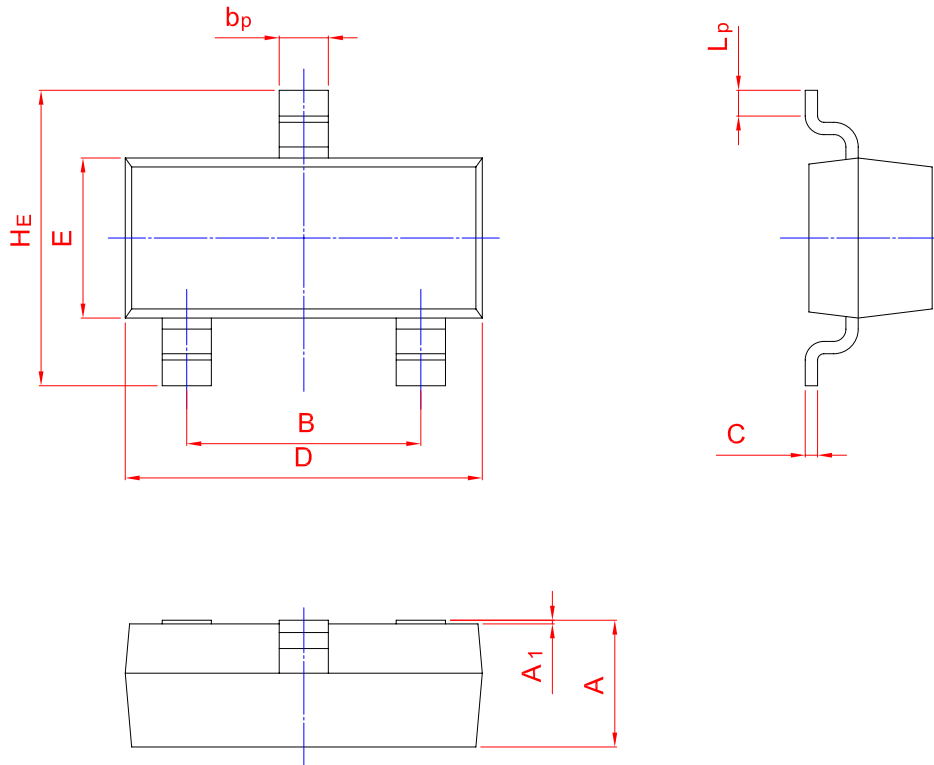
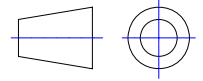
# MMBT8550D



# PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

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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