

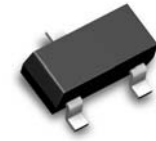
FEATURE:

- ◆ Power Dissipation
- ◆ This device is designed for general purpose high voltage amplifiers and gas discharge display drivers.

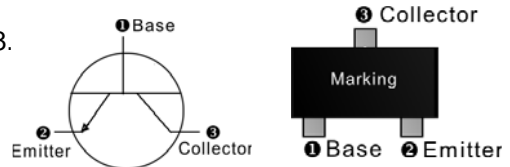
MECHANICAL CHARACTERISTICS:

- ◆ Case: SOT-23 Molded Plastic
- ◆ Weight: 0.01 Grams (approx)
- ◆ Marking: Body top
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 208.
- ◆ Mounting: Position any

Figure



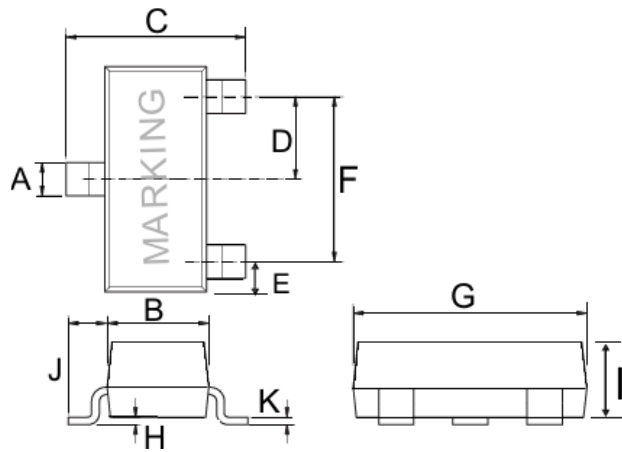
SOT-23 MMBT5550(Top View



DIMENSION:

mm

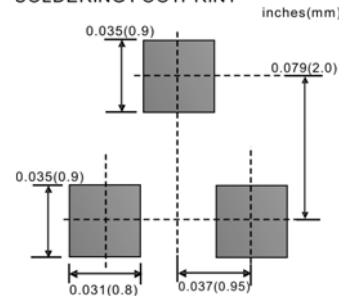
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.4
C	2.1	2.5
D	0.89	1.05
E	0.45	0.61
F	1.78	2.05
G	2.65	3.05
H	0.013	0.15
I	0.89	1.1
J	0.45	0.61
K	0.076	0.178



Maximum Ratings @T_A=25°C unless otherwise noted

Parameter	Symbol	Value	Units
Collector-Base Voltage	V _{CBO}	160	V
Collector-Emitter Voltage	V _{CEO}	140	V
Emitter-Base Voltage	V _{EBO}	6.0	V
Collector Current - Continuous	I _C	600	mA
Collector Power Dissipation	P _C	225	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~150	°C
Thermal Resistance From Junction to Ambient	T _{θJA}	556	°C/W

SOLDERING FOOTPRINT



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雙極型晶體管

MMBT5550

SOT-23 NPN General Purpose Amplifier

□ Electrical Characteristics $T_{amb}=25^{\circ}C$ unless otherwise specified

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
Collector-Base Breakdown voltage	$V(BR)_{CBO}$	$I_C=0.1mA, I_E=0$	160	---	V
Collector-Emitter Breakdown voltage	$V(BR)_{CEO^*}$	$I_C=1mA, I_B=0$	140	---	V
Emitter-Base Breakdown voltage	$V(BR)_{EBO}$	$I_E=0.01mA, I_C=0$	6	---	V
Collector cut-off current	I_{CBO}	$V_{CB}=100V, I_E=0$	---	0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$	---	50	nA
DC Current gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=1mA$	60	---	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=10mA$	60	250	
	$h_{FE(3)}$	$V_{CE}=5V, I_C=50mA$	20	---	
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=10mA, I_B=1mA$	---	0.15	V
	$V_{CE(sat)2}$	$I_C=50mA, I_B=5mA$	---	0.25	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	$I_C=10mA, I_B=1mA$	---	1	V
	$V_{BE(sat)2}$	$I_C=50mA, I_B=5mA$	---	1.2	V

* Pulse Test: Pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$

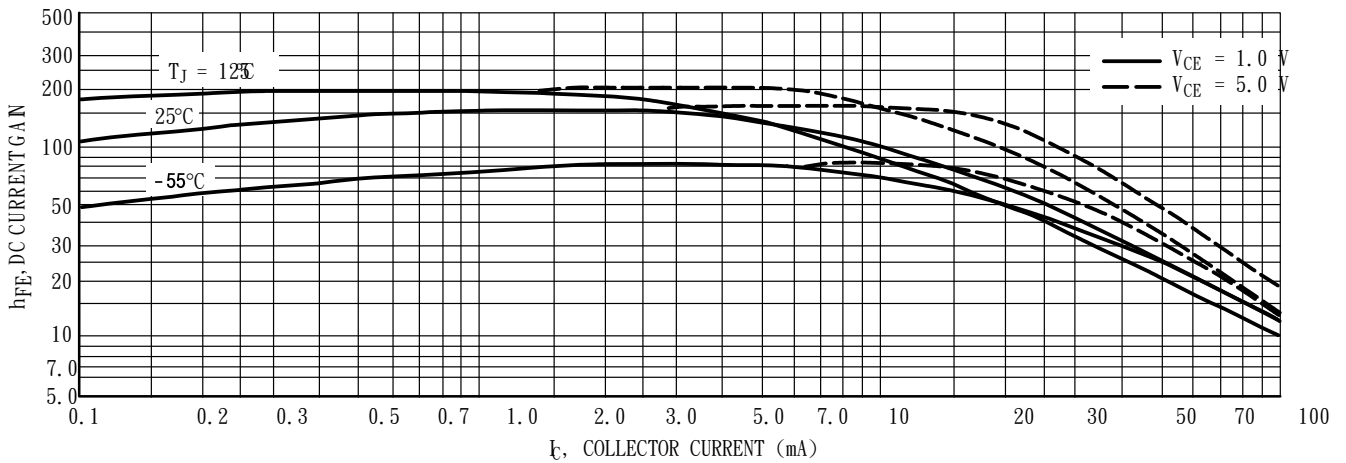


Figure 1. DC Current Gain

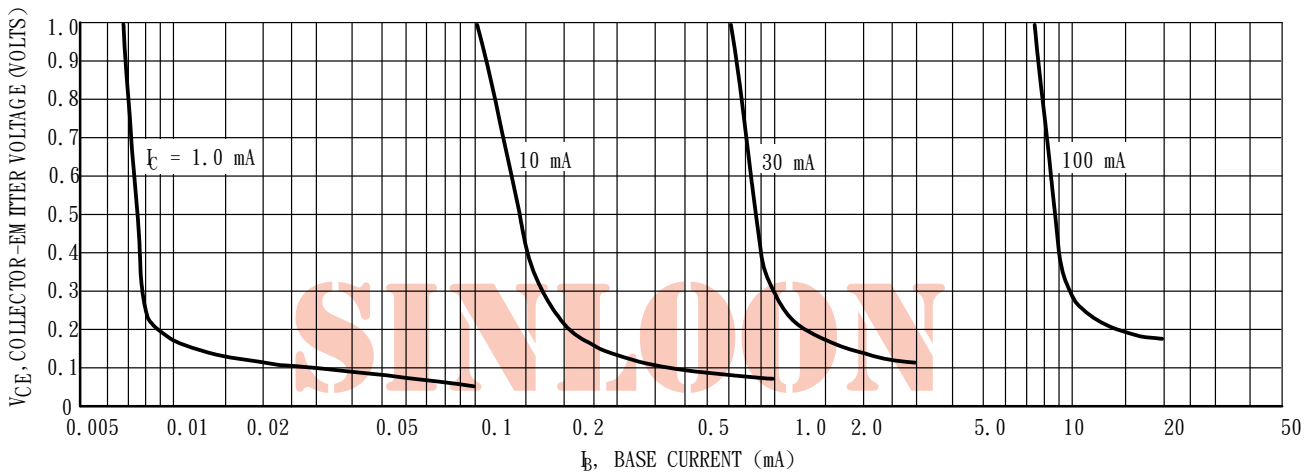


Figure 2. Collector Saturation Region



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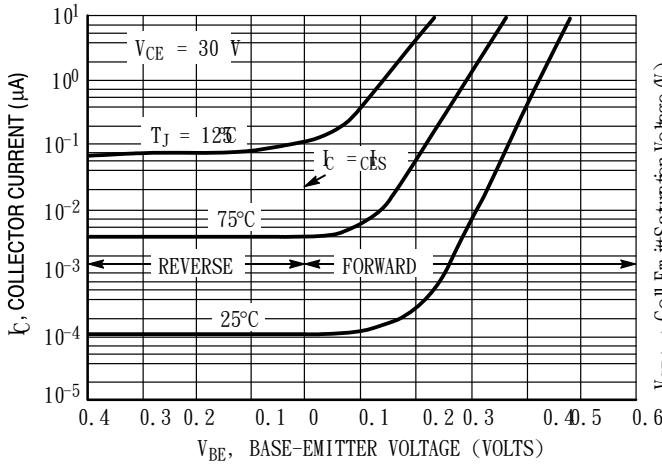


Figure 3. Collector Cutoff Region

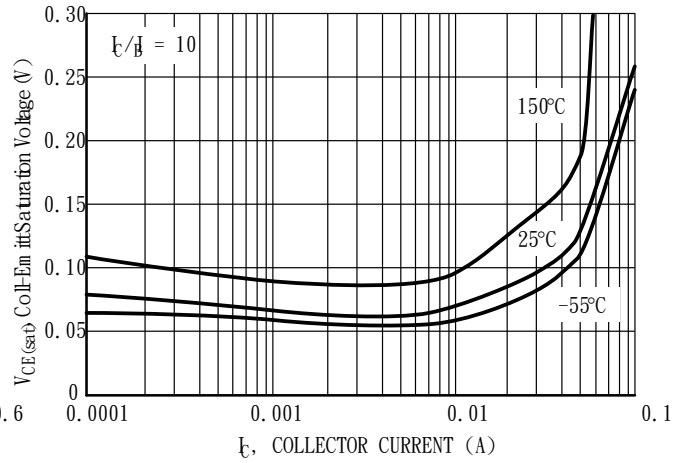


Figure 4. $V_{CE(sat)}$

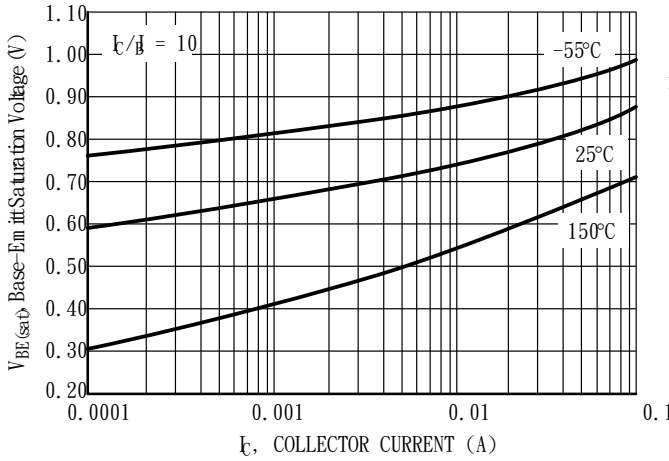


Figure 5. $V_{BE(sat)}$

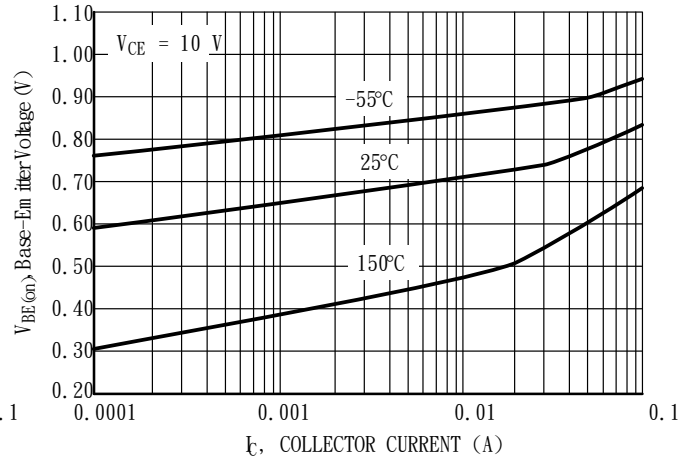


Figure 6. $V_{BE(on)}$

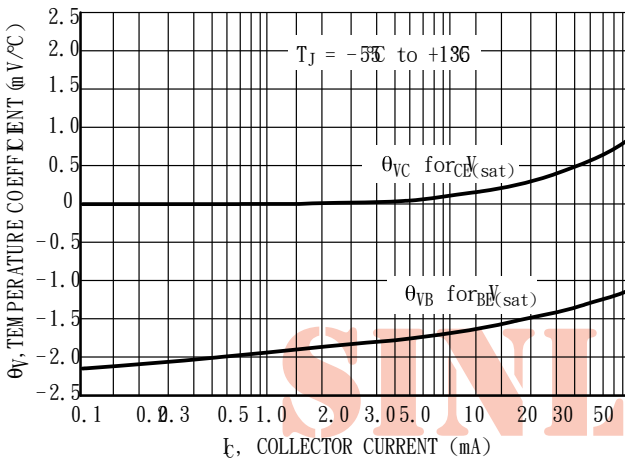


Figure 7. Temperature Coefficients

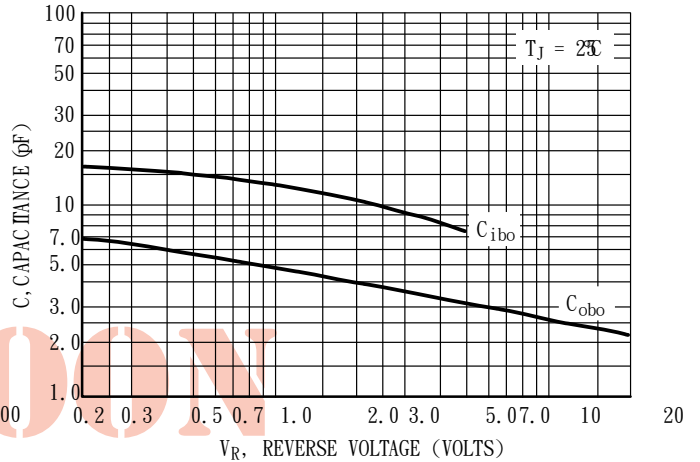


Figure 8. Capacitances



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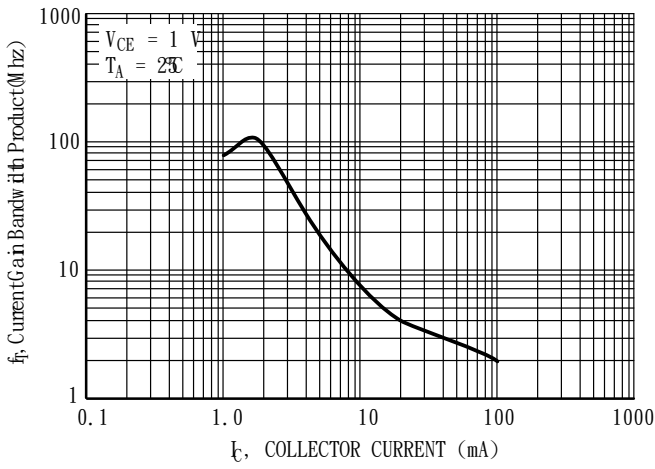


Figure 10. Current Gain Bandwidth Product

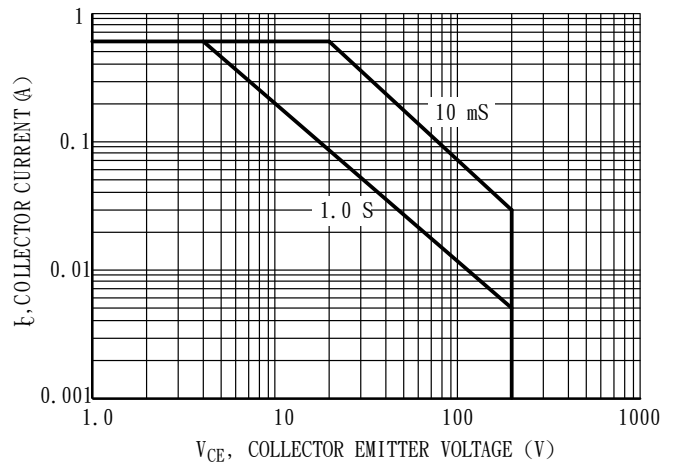


Figure 11. Safe Operating Area

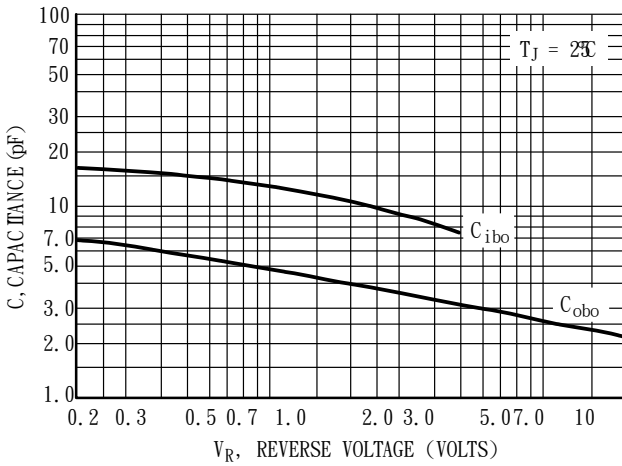


Figure 12. Capacitances

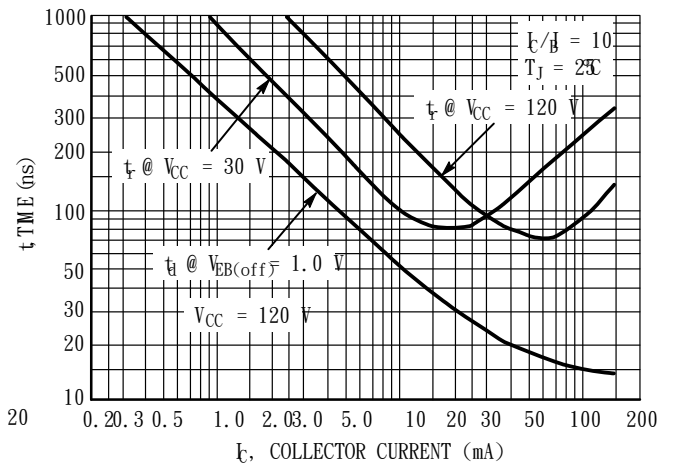


Figure 13. Turn-On Time

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MMBT5550

SOT-23 NPN General Purpose Amplifier

COMMON PACKING INFORMATION:

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
MMBT5550	SOT-23	3000 Tape & Reel	180,000 Ctn	12 Kg

Reel Diameter (Inch)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
7"	3000	L: 203 x W:203 x H:195	L:439 x W:438 x H:220

Plastic Reel : Fig-1

Inner Box: Fig-2

Inner Box Qty: 45,000 PCS



Reel



Carton Pack Fig-3

Carton Qty: 180,000 PCS



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Mayloon characteristic parameters of electronic product specification changes or updates without prior notice。

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