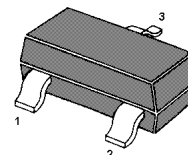


## NPN Silicon Epitaxial Planar Transistor

for low frequency power amplifier applications and power switching application.

The transistor is subdivided into two groups, O and Y according to its DC current gain.



1.Base 2.Emitter 3.Collector  
SOT-23 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	35	V
Collector Emitter Voltage	$V_{CEO}$	30	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	800	mA
Base Current	$I_B$	160	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	-55 to +150	$^\circ\text{C}$



**Characteristics at  $T_{amb}=25\text{ }^{\circ}\text{C}$**

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$ , $I_C=100\text{mA}$					
Current Gain Group O	$h_{FE}$	100	-	200	-
Y	$h_{FE}$	160	-	320	-
at $V_{CE}=1\text{V}$ , $I_C=800\text{mA}$	$h_{FE}$	40	-	-	-
Collector Cutoff Current at $V_{CB}=30\text{V}$	$I_{CBO}$	-	-	100	nA
Emitter Cutoff Current at $V_{EB}=5\text{V}$	$I_{EBO}$	-	-	100	nA
Collector Emitter Breakdown Voltage at $I_C=10\text{mA}$	$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $I_E=1\text{mA}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C=500\text{mA}$ , $I_B=20\text{mA}$	$V_{CE(sat)}$	-	-	0.5	V
Transition Frequency at $V_{CE}=5\text{V}$ , $I_C=10\text{mA}$ , $f=100\text{MHz}$	$f_T$	-	120	-	MHz
Base Emitter Voltage at $I_C=10\text{mA}$ , $V_{CE}=1\text{V}$	$V_{BE}$	0.5	-	0.8	V
Collector Output Capacitance at $V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	13	-	pF



**CHINA BASE**  
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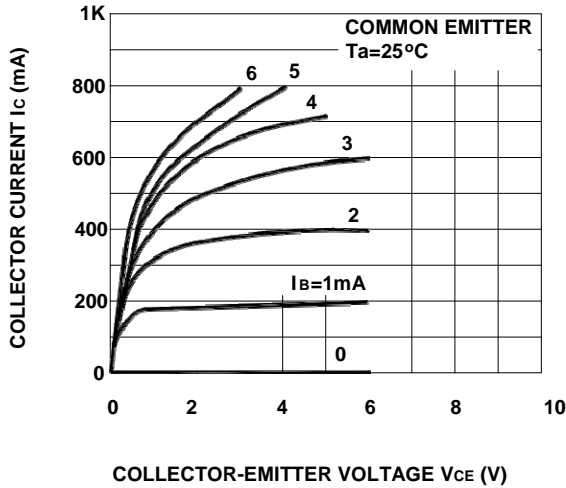
**SOT-23**

**MMBTSC3265**

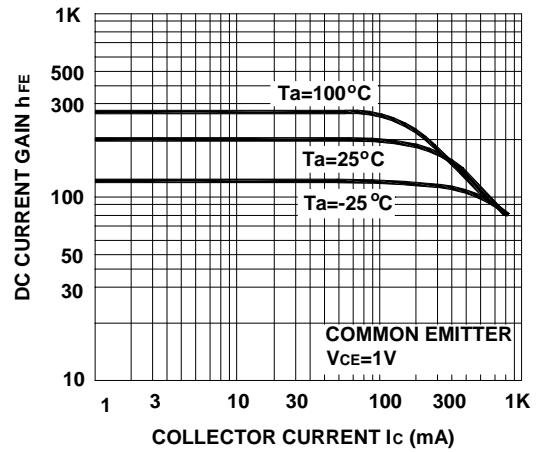


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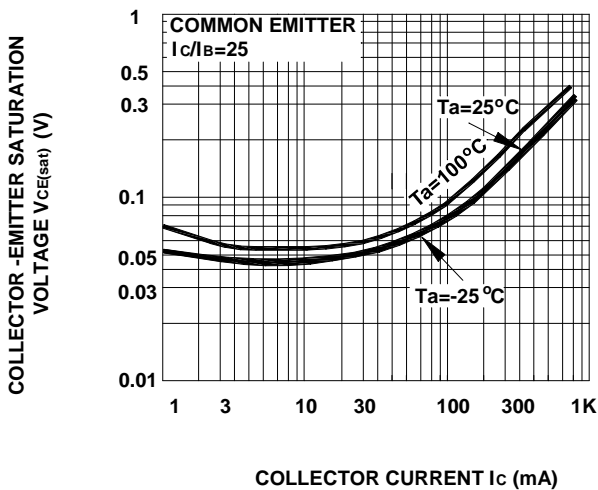
Ic - Vce



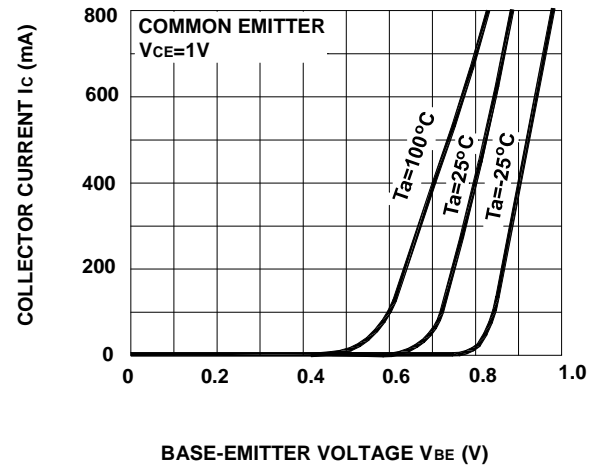
hFE - Ic



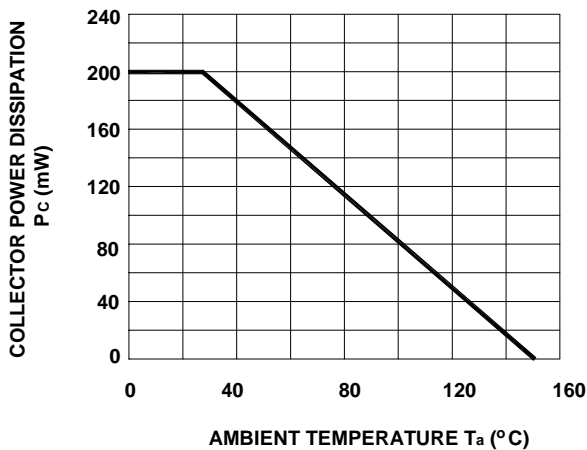
Vce(sat) - Ic



Ic - VBE



Pc - Ta

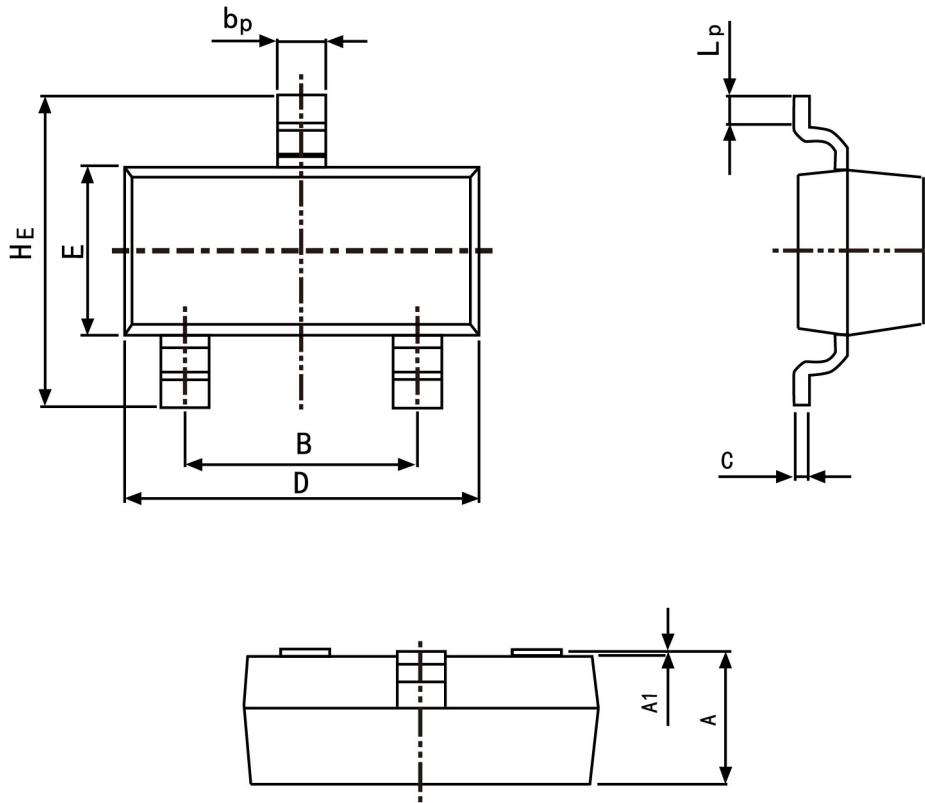




**PACKAGE OUTLINE**

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
bp	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
A1	0.100	0.013
Lp	0.20	0.50