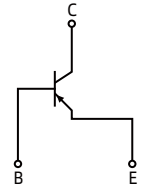


## Features

- Collector current  $I_C = -0.5A$ .
- Power amplifier applications.
- Complementary to S8050.



SOT23



Equivalent Circuit

## Absolute Maximum Ratings ( $T_A = 25^\circ C$ )

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-0.5	A
$P_C$	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	400	$^\circ C/W$
$T_J, T_{stg}$	Operation Junction And Storage Temperature Range	-55 ~ +150	$^\circ C/W$

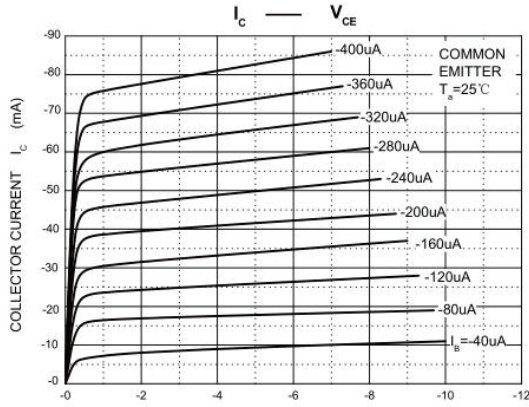
## Electrical Characteristics ( $T_A = 25^\circ C$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = 100\mu A, I_E = 0$	-40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -0.1 mA, I_B = 0$	-25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -100\mu A, I_C = 0$	-5			V
$I_{CEO}$	Collector cut-off current	$V_{CE} = -20V, I_E = 0$			-100	nA
$I_{CBO}$	Collector cut-off current	$V_{CB} = -40V, I_E = 0$			-100	nA
$I_{EBO}$	Emitter cut-off current	$V_{EB} = -5V, I_C = 0$			-100	nA
$h_{FE(1)}$	DC current gain(1)	$V_{CE} = -1V, I_C = -50mA$	200		350	
$h_{FE(2)}$	DC current gain(2)	$V_{CE} = -1V, I_C = -500mA$	50			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -500mA, I_B = -50mA$			-0.6	V
$V_{BE(sat)}$	Base-emitter saturation voltage				-1.2	V
$V_{BE}$	Base-emitter voltage	$V_{CE} = -1V, I_C = -10mA$			-1	V
$f_T$	Transition frequency	$V_{CE} = -6V, I_C = -20mA, f = 30MHz$	150			MHz

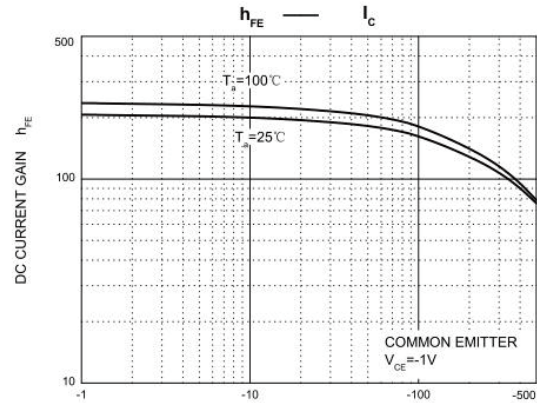
## Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE(1)}$	Qty(PCS)
S8550	SOT23	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>S8550</b>  <small>产品名称 product name</small> </div>	2TY	200 ~ 350	3000

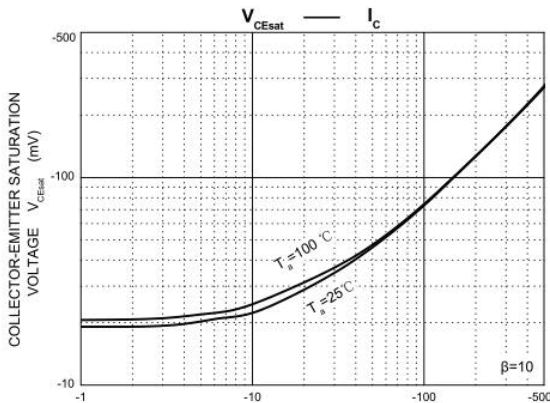
## Typical Characteristics



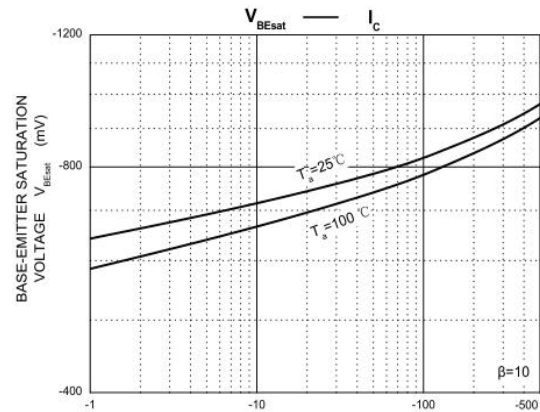
COLLECTOR-EMITTER VOLTAGE  $V_{CE}(V)$



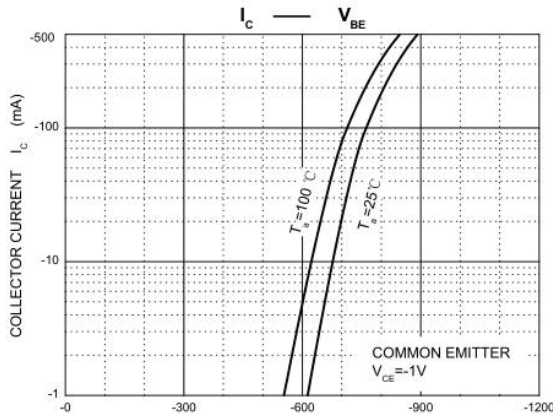
COLLECTOR CURRENT  $I_c(mA)$



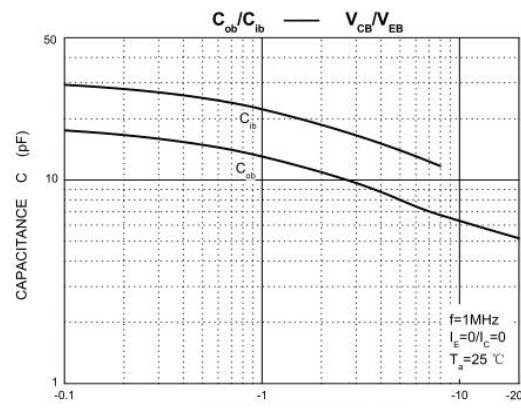
COLLECTOR CURRENT  $I_c(mA)$



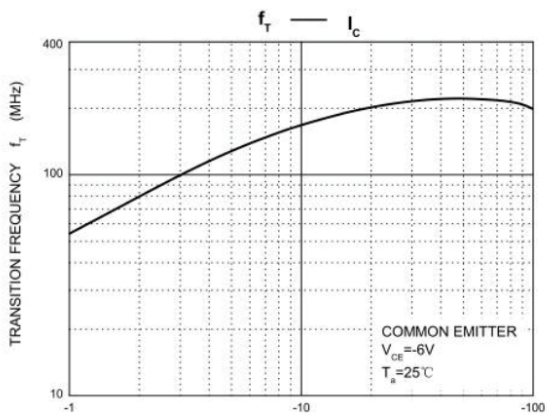
COLLECTOR CURRENT  $I_c(mA)$



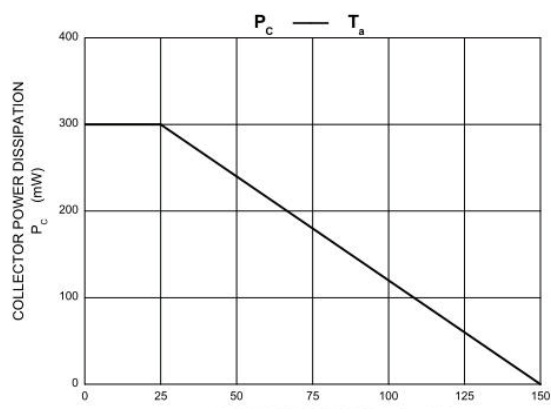
BASE-EMITTER VOLTAGE  $V_{BE}(V)$



VOLTAGE  $V(V)$

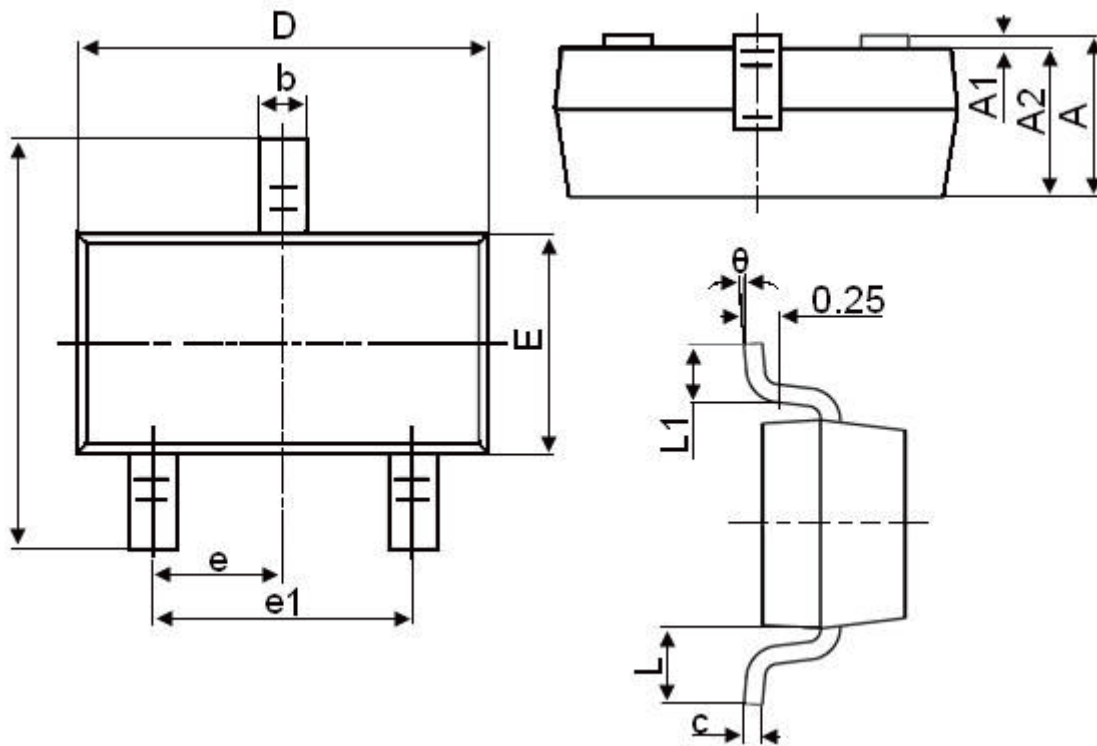


COLLECTOR CURRENT  $I_c(mA)$



AMBIENT TEMPERATURE  $T_a(^{\circ}C)$

## SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°