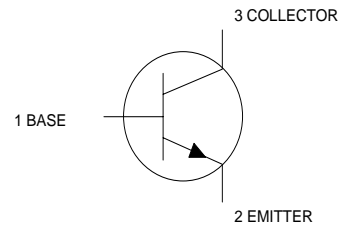


»Features

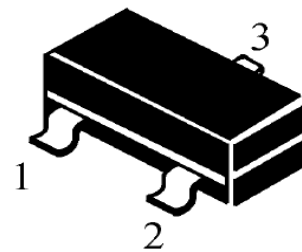
$V_{CE} = 45V$   
 $I_C = 0.1A$   
 $f_T = 150MHz @V_{CE}=5V, I_C=10mA, f=30MHz$

»Pin Configurations



»General Description

- As complementary type the PNP transistor S9015 is recommended
- Epitaxial planar die constructio
- SOT-23 Plastic Package.



»Absolute Maximum Ratings @ $T_A=25^{\circ}C$  unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{CEO}$	Collector-Emitter Voltage	45	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	100	mA
$P_C$	Total Device Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}C/W$
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55 to +150	$^{\circ}C$

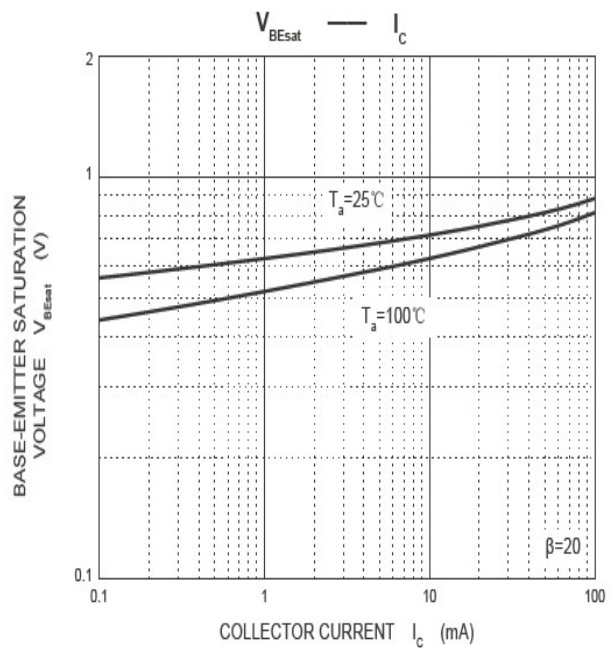
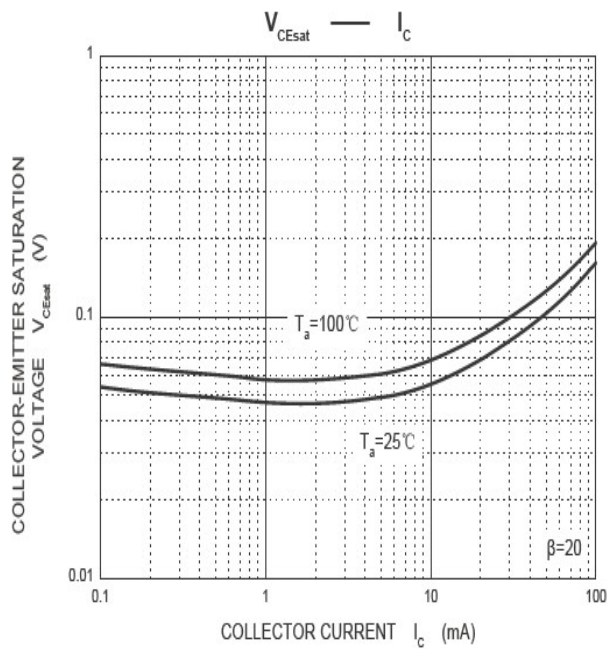
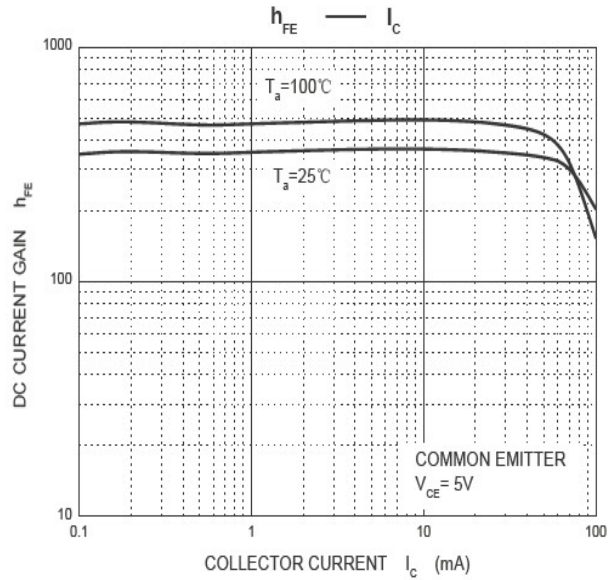
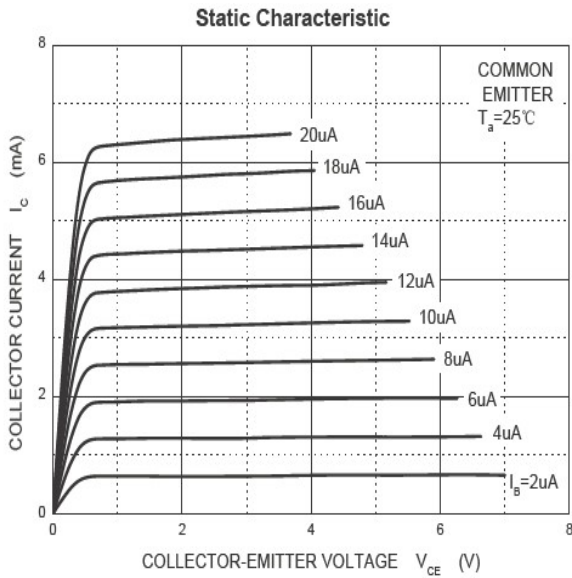
**»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$  unless otherwise noted**

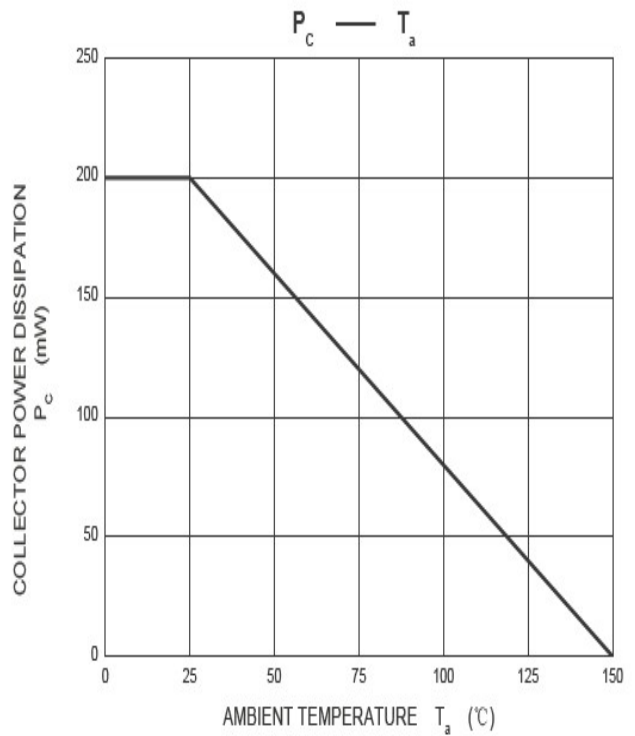
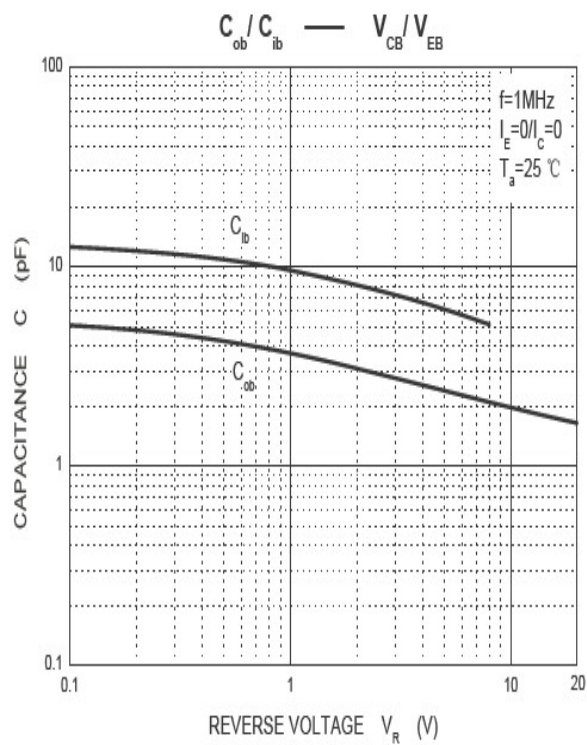
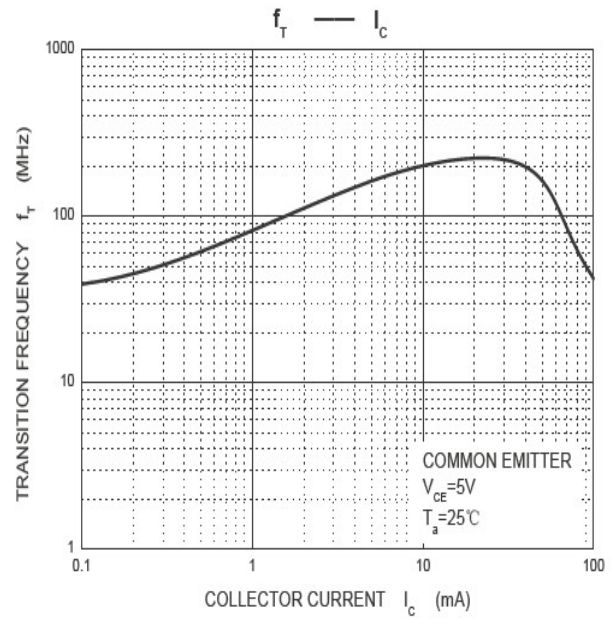
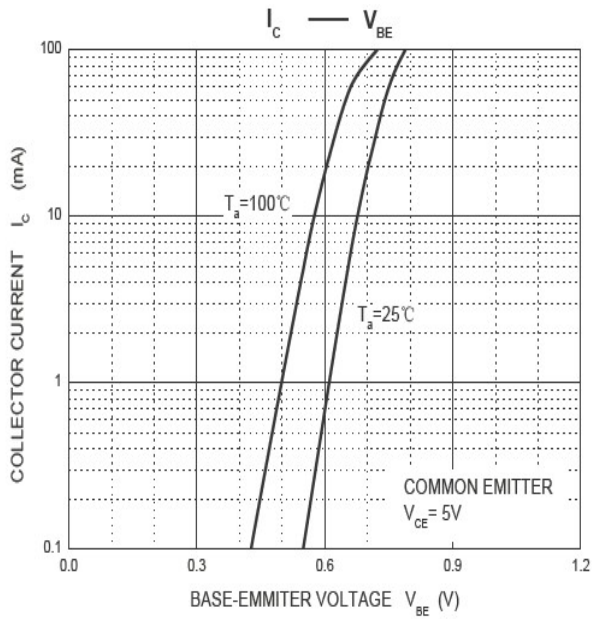
Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	<b>V(BR)CBO</b>	$I_C=100\mu\text{A}, I_E=0$	50		V
Collector-emitter breakdown voltage	<b>V(BR)CEO</b>	$I_C=0.1\text{mA}, I_B=0$	45		V
Emitter-base breakdown voltage	<b>V(BR)EBO</b>	$I_E=100\mu\text{A}, I_C=0$	5		V
Collector cut-off current	<b>ICEO</b>	$V_{CE}=35\text{V}, I_B=0$		100	nA
Collector cut-off current	<b>ICBO</b>	$V_{CB}=50\text{V}, I_E=0$		100	nA
Emitter cut-off current	<b>IEBO</b>	$V_{EB}=3\text{V}, I_C=0$		100	nA
DC current gain	<b>hFE</b>	$V_{CE}=5\text{V}, I_C=1\text{mA}$	200	1000	
Collector-emitter saturation voltage	<b>VCE(sat)</b>	$I_C=100\text{mA}, I_B=5\text{mA}$		0.30	V
Base -emitter saturation voltage	<b>VBE(sat)</b>	$I_C=100\text{mA}, I_B=5\text{mA}$		1.00	V
Transition frequency	<b>fT</b>	$V_{CE}=5\text{V}, I_C=10\text{mA}, f=30\text{MHz}$	150		MHz

**CLASSIFICATION OF  $h_{FE(1)}$** 

RANK	L	H
RANGE	200-450	450-1000

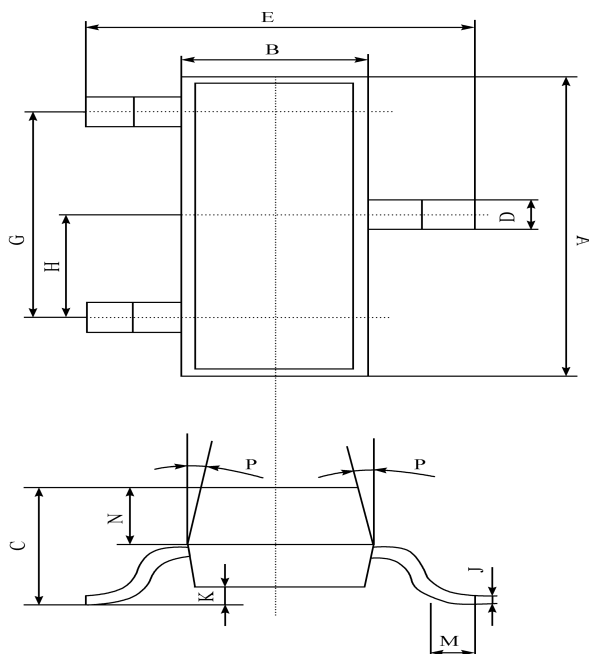
»Typical Performance Characteristics (T<sub>J</sub> = 25 °C, unless otherwise noted)





»Package Information

**SOT-23**



A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	0.00-0.10
M	≥ 0.2
N	0.60 ± 0.10
P	7 ± 2°

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
S9014	SOT-23	J6	3K	Tape and reel