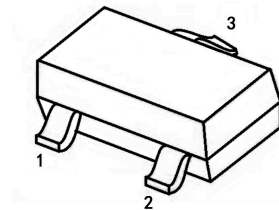


## TRANSISTOR (NPN)

### FEATURES

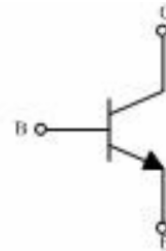
- High breakdown voltage
- Excellent current characteristics
- Low  $V_{CE(sat)}$
- Complimentary to S8550
- Collector Current:  $I_C=0.5A$

### SOT-23



- 1. BASE
- 2. EMITTER
- 3. COLLECTOR

### ELECTRICAL SYMBOL



### MARKING: J3Y

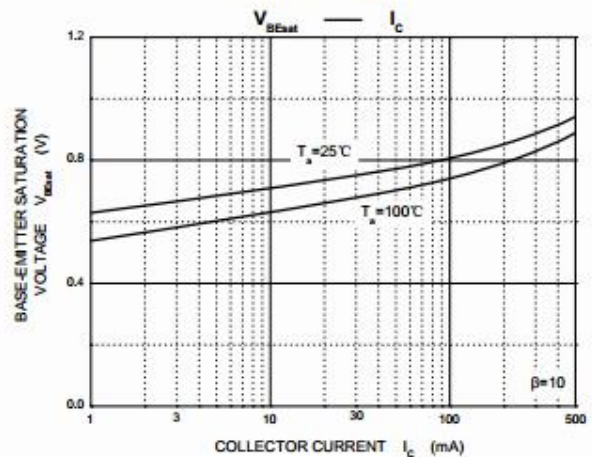
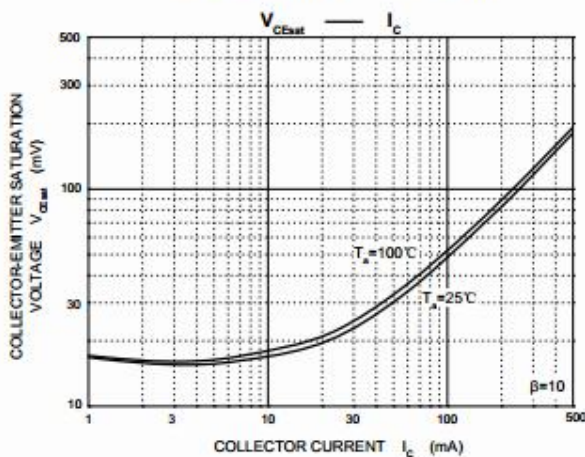
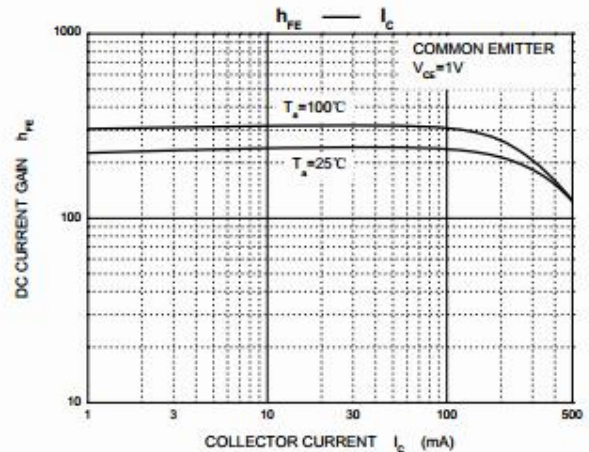
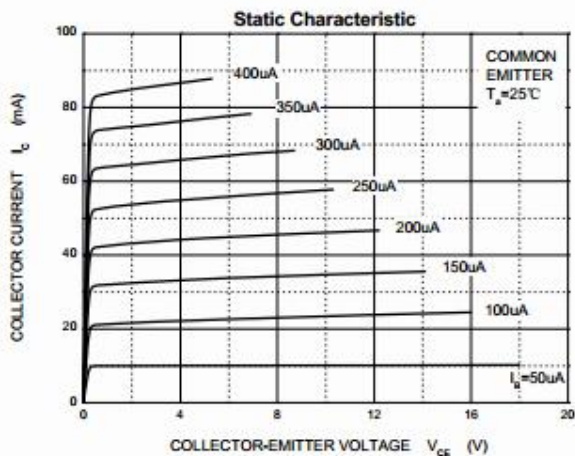
### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ unless otherwise noted )

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	40	V
Collector-Emitter Voltage	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_{CM}$	0.5	A
Power Dissipation	$P_D$	0.625	W
Junction Temperature	$T_J$	150	$^{\circ}C$
Storage Temperature	$T_{stg}$	-55~150	$^{\circ}C$

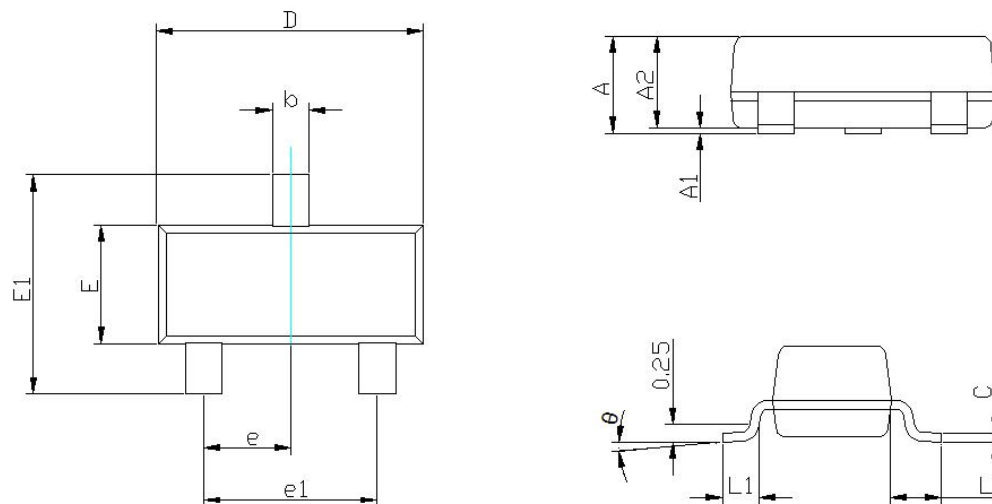
**ELECTRICAL CHARACTERISTICS** (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Emitter-base breakdown voltage	$BV_{EBO}$	$I_E=100\mu A, I_C=0$	5		V
Collector-base breakdown voltage	$BV_{CBO}$	$I_C=100\mu A, I_E=0$	40		V
Collector-emitter breakdown voltage	$BV_{CEO}$	$I_C=1mA, I_B=0$	25		V
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$		0.1	$\mu A$
Collector cut-off current	$I_{CBO}$	$V_{CB}=40V, I_E=0$		0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE}=20V, I_B=0$		0.1	$\mu A$
Collector-emitter saturation voltage	$V_{CESAT}$	$I_C=500mA, I_B=50mA$		0.6	V
Base-emitter saturation voltage	$V_{BESAT}$	$I_C=500mA, I_B=50mA$		1.2	V
DC current gain	$h_{fe}$	$V_{CE}=1V, I_C=50mA$	200	350	
Transition frequency	$f_T$	$V_{CE}=6V, I_C=20mA$ $F=30MHz$	150		MHZ

**Typical Characteristics**



**SOT-23 Package Outline Dimensions**



<b>SYMBOL</b>	<b>MIN</b>	<b>MAX</b>
<b>A</b>	0.900	1.15
<b>A1</b>	0.000	0.125
<b>A2</b>	0.900	1.050
<b>b</b>	0.300	0.500
<b>c</b>	0.080	0.150
<b>D</b>	2.800	3.000
<b>E</b>	1.200	1.400
<b>E1</b>	2.250	2.550
<b>e</b>	0.950TYP	
<b>e1</b>	1.800	2.000
<b>L</b>	0.550REF (0.4-0.6)	
<b>L1</b>	0.300	0.500
<b>θ</b>	0°	8°

unit: mm