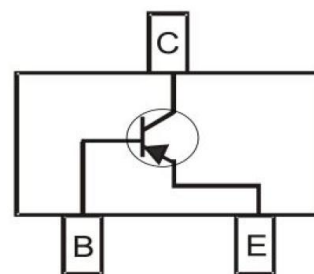


**Kingtronics**®**SS8550****BIPOLAR  
TRANSISTOR (PNP)****FEATURES**

Complementary to SS8050  
High Collector Current  
Surface Mount device

**MECHANICAL DATA**

Case: SOT-323  
Case Material: Molded Plastic. UL flammability  
Classification Rating: 94V-0  
Moisture Sensitivity: Level 1 per J-STD-020  
Weight: 0.008 grams (approximate)

**SOT-323****MAXIMUM RATINGS (T<sub>A</sub> = 25° C unless otherwise noted)**

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	-40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-25	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>C</sub>	-1500	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25° C unless otherwise specified)**

PARAMETER	SYMBOL	MIN.	TYP	MAX.	UNIT	CONDITION
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	-40			V	I <sub>C</sub> =-100uA, I <sub>E</sub> =0
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	-25			V	I <sub>C</sub> =-0.1mA, I <sub>B</sub> =0
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	-5			V	I <sub>E</sub> =-100uA, I <sub>C</sub> =0
Collector cut-off current	I <sub>CBO</sub>			-0.1	uA	V <sub>CB</sub> =-40V, I <sub>E</sub> =0
Collector cut-off current	I <sub>CEO</sub>			-0.1	uA	V <sub>CE</sub> = -20V, I <sub>B</sub> =0
Emitter cut-off current	I <sub>EBO</sub>			-0.1	uA	V <sub>EB</sub> =-5V, I <sub>C</sub> =0
DC current gain	h <sub>FE1</sub>	40	120	400		V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA V <sub>CE</sub> = -1V, I <sub>C</sub> = -800mA
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>			-0.5	V	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA
Base-emitter saturation voltage	V <sub>BE(sat)</sub>			-1.2	V	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA
Base-emitter voltage	V <sub>BE</sub>			-1	V	V <sub>CE</sub> = -1V, I <sub>C</sub> = -10mA
Transition frequency	f <sub>T</sub>	100			MHz	V <sub>CE</sub> =-10V, I <sub>C</sub> =-50mA, f=30MHz
Collector output capacitance	C <sub>Ob</sub>			20	pF	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz

**CLASSIFICATION OF h<sub>FE</sub>**

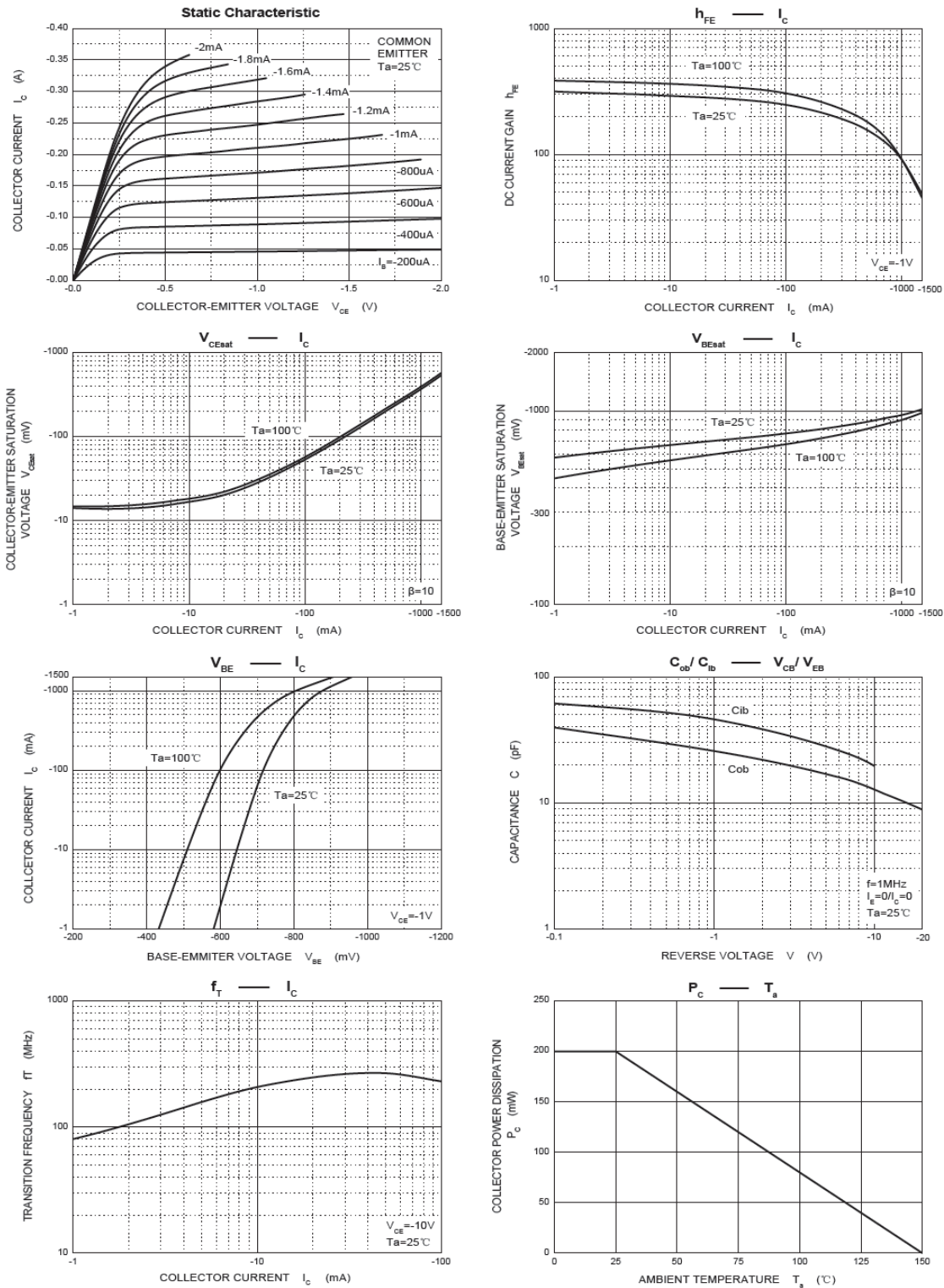
Rank	L	H	J
Range	120-200	200-350	300-400
Marking		Y2	

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## SS8550 BIPOLAR TRANSISTOR (PNP)

### Typical Characteristics

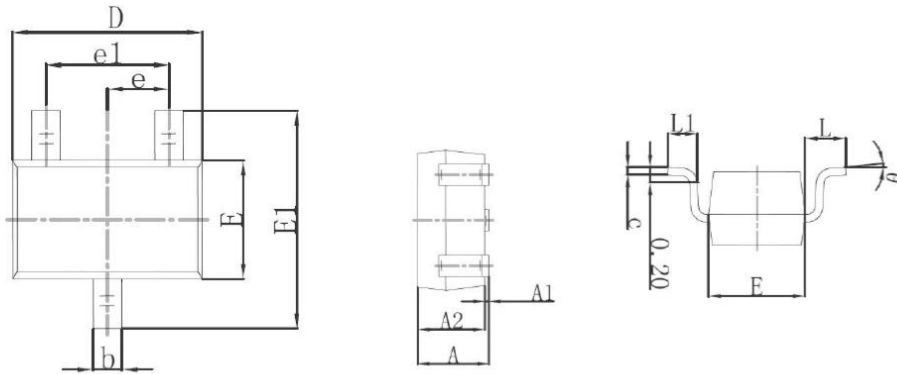


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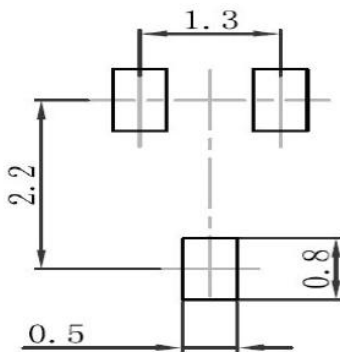
## SS8550 BIPOLAR TRANSISTOR (PNP)

### SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
$\theta$	0°	8°	0°	8°

### SOT-323 Suggested Pad Layout



#### Note:

1. Controlling dimension: in millimeters
2. General tolerance:  $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

Note: Specifications are subject to change without notice.

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