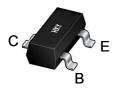


### **FEATURES**

• Collector Current: I<sub>C</sub>=0.1A

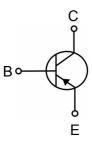
Power Dissipation of 200mw



**SOT-23** 

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
S9015	SOT-23	M6	3000



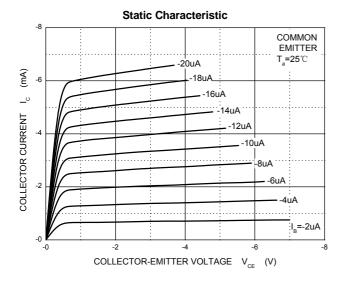
## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

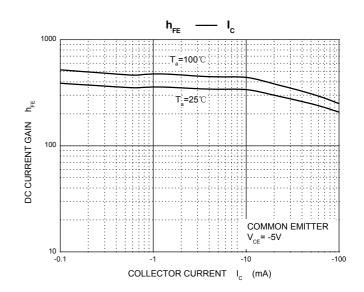
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-45	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>c</sub>	-100	mA
Collector Power Dissipation	P <sub>c</sub>	200	mW
Thermal Resistance From Junction To Ambient	R <sub>OJA</sub>	625	°C/W
Junction Temperature	T <sub>j</sub>	150	${\mathfrak C}$
Storage Temperature	T <sub>stg</sub>	-55∼+150	℃

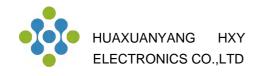
# ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

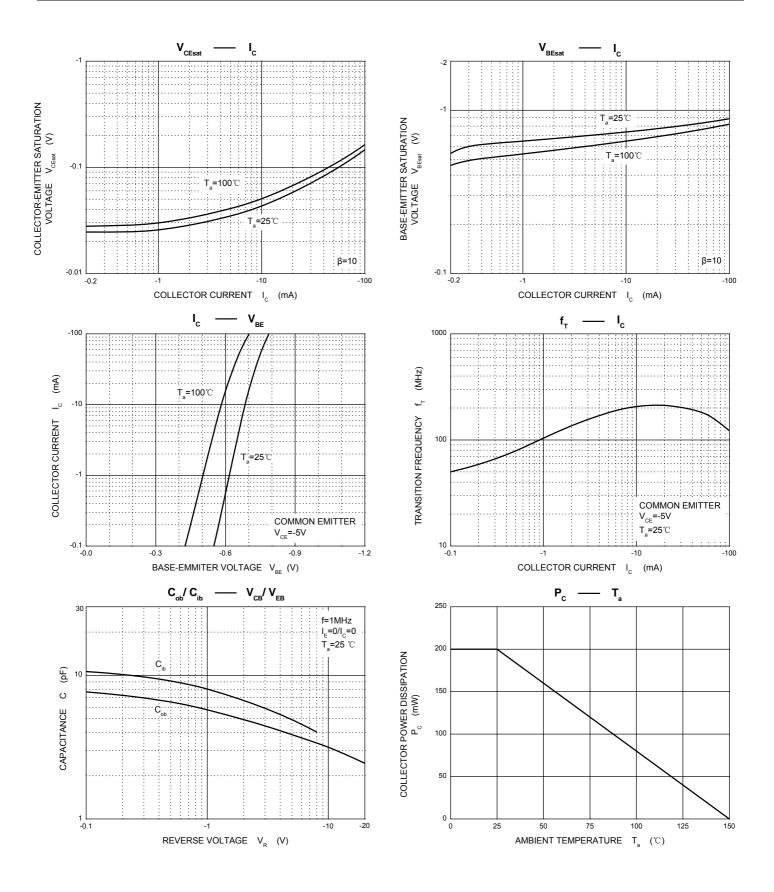
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -100μA, I <sub>E</sub> =0	-50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -0.1mA, I <sub>B</sub> =0	-45			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μΑ, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-50 V, I <sub>E</sub> =0			-0.1	μΑ
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			-0.1	μΑ
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> = -1mA	200		1000	
Collector-emitter saturation voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =-100mA, I <sub>B</sub> = -10mA			-0.3	V
Base-emitter saturation voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-1	V
Transition frequency	f⊤	V <sub>CE</sub> =-5V, I <sub>C</sub> = -10mA f=30MHz	150			MHz

### **Typical Characteristics**



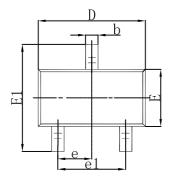


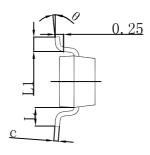


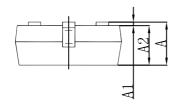




### **SOT-23 Package Outline Dimensions**

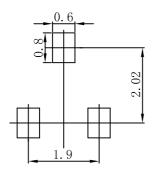






Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
E	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950	)TYP	0.037 TYP		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF		0.022 REF		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	

## **SOT-23 Suggested Pad Layout**



#### Note:

- 1.Controlling dimension:in millimeters.
- 2.General tolerance:± 0.05mm.
  3.The pad layout is for reference purposes only.

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