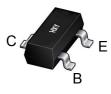


# FEATURES

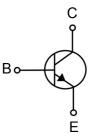
- High DC current gain :h<sub>FE</sub>=200(Typ) V<sub>CE</sub>=6V,I<sub>C</sub>=1mA
- High voltage:V<sub>CEO</sub>=50V





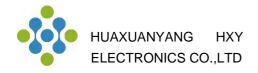
# Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2SC1623	SOT-23	L6	3000



# MAXIMUM RATINGS (Ta=25 unless otherwise noted)

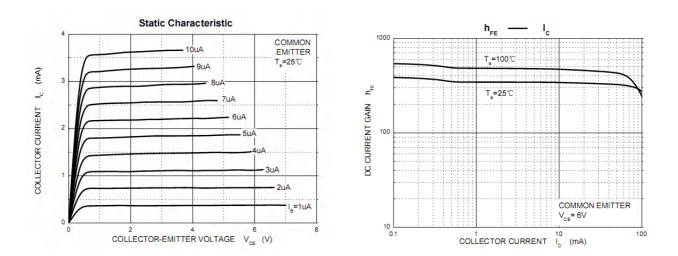
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V <sub>CBO</sub>	60	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	Ι <sub>c</sub>	100	mA
Collector Power Dissipation	Pc	200	mW
Thermal Resistance From Junction To Ambient	R <sub>OJA</sub>	625	°C/W
Junction Temperature	Tj	150	ĉ
Storage Temperature	T <sub>stg</sub>	-55~+150	°C

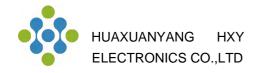


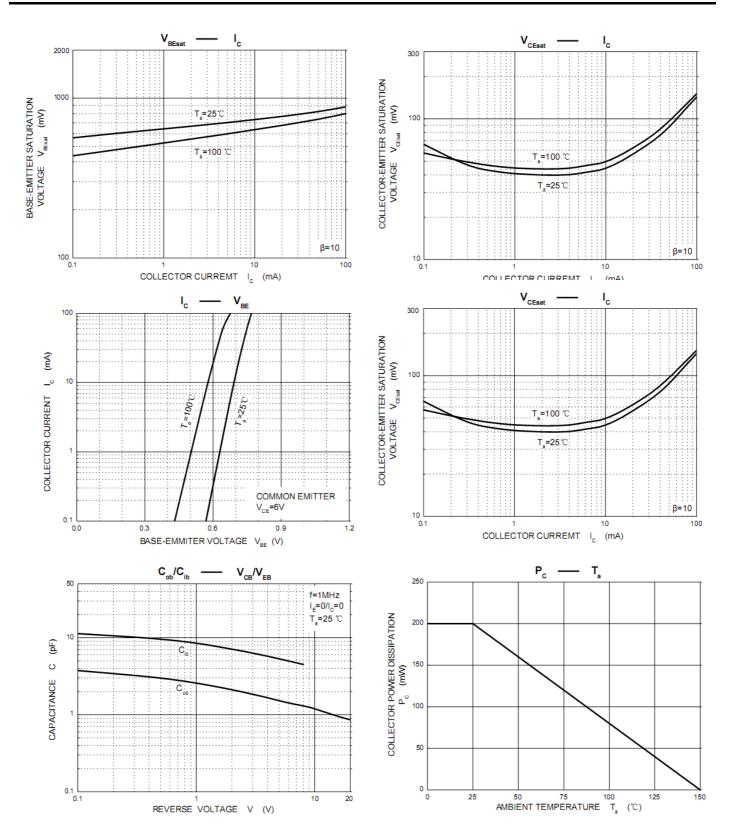
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μΑ,I <sub>E</sub> =0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I <sub>C</sub> =1mA,I <sub>B</sub> =0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I <sub>E</sub> =100μA,I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =60V,I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V,I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =6V,I <sub>C</sub> =1mA	90	200	600	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA,I <sub>B</sub> =10mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I <sub>C</sub> =100mA,I <sub>B</sub> =10mA			1	V
Transition frequency	f⊤	V <sub>CE</sub> =6V,I <sub>C</sub> =10mA		250		MHz

## ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

#### **Typical Characteristics**

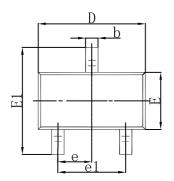


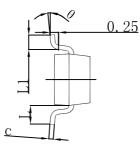


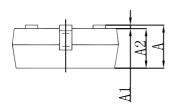




## **SOT-23 Package Outline Dimensions**

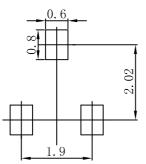






Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
Е	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950 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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