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2SC1623 TRANSISTOR (NPN)

SOT-23 Plastic-Encapsulate Transistors

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客户确认：

公司签章：

部门	工程部	品保部	采购部
签名			
日期			

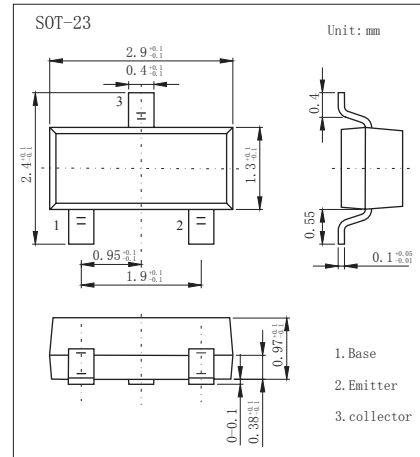


SOT-23 Plastic-Encapsulate Transistors

2SC1623 NPN Transistors

■ Features

- High DC Current Gain:
hFE = 200 TYP.
VCE = 6.0 V, Ic = 1.0 mA
- High Voltage:
VCE0 = 50 V



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	60	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V _{EB0}	5	V
Collector current (DC)	I _c	100	mA
Collector power dissipation	P _c	200	mW
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CBO}	I _c = 100 μA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = 1 mA, I _B = 0	50			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _C = 0	5			
Collector-base cut-off current	I _{CBO}	V _{CB} = 60 V, I _E = 0			100	nA
Emitter cut-off current	I _{EB0}	V _{EB} = 5 V, I _C = 0			100	
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C = 100 mA, I _B = 10mA		0.15	0.3	V
Base - emitter saturation voltage *	V _{BE(sat)}	I _C = 100 mA, I _B = 10mA		0.86	1	
Base - emitter voltage *	V _{BE}	V _{CE} = 6V, I _C = 1mA	0.55		0.7	
DC current gain *	h _{FE}	V _{CE} = 6V, I _C = 1mA	90	200	600	
Collector output capacitance	C _{ob}	V _{CB} = 6V, I _E = 0, f = 1MHz		3		pF
Transition frequency	f _T	V _{CE} = 6V, I _E = -10mA		250		MHz

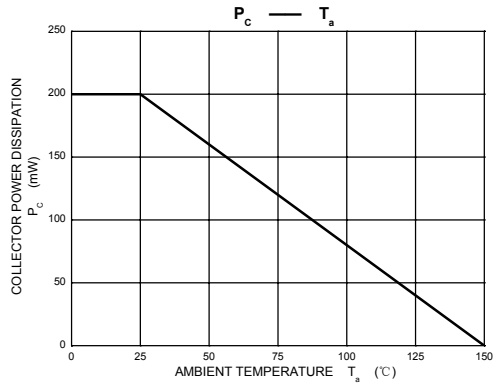
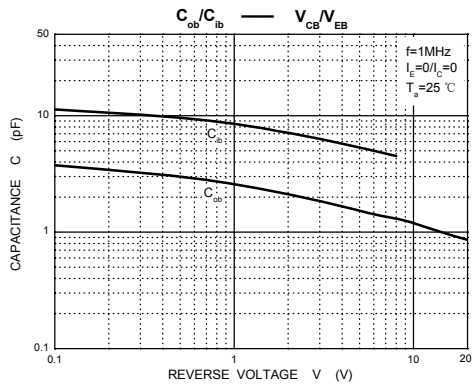
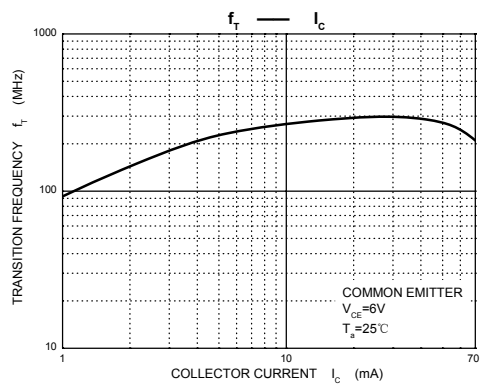
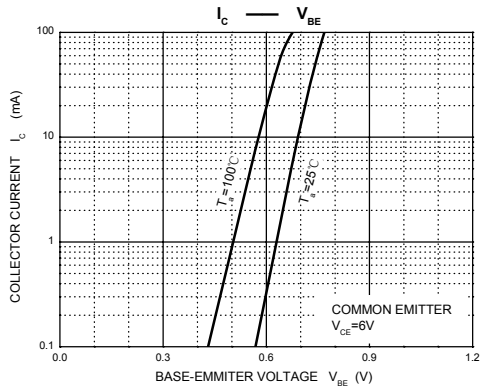
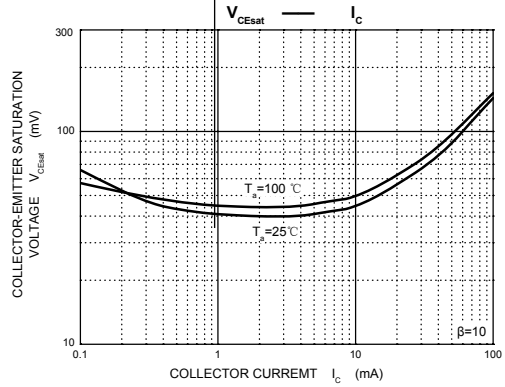
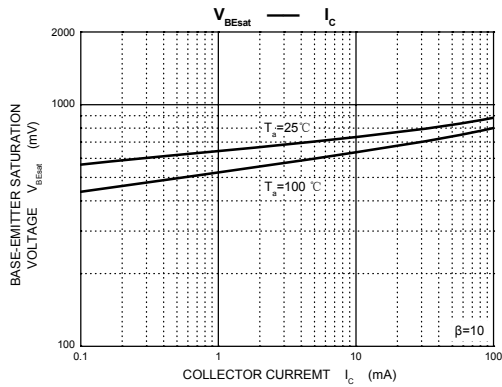
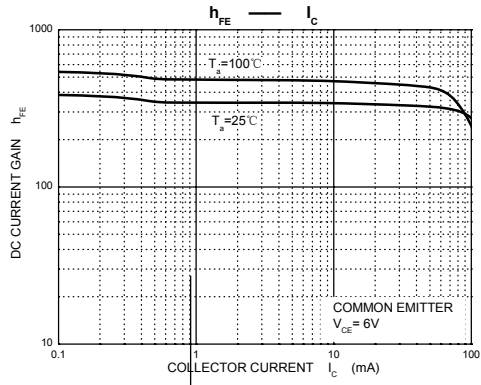
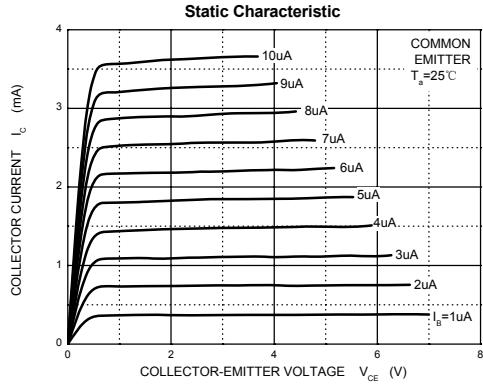
*. PW ≤ 350 us, duty cycle ≤ 2%

■ hFE Classification

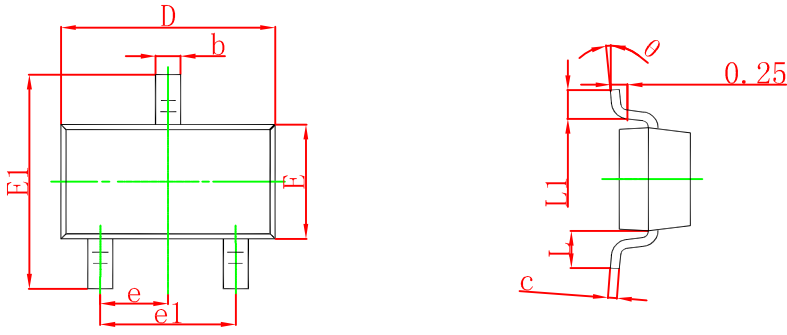
Type	2SC1623-L4	2SC1623-L5	2SC1623-L6	2SC1623-L7
Range	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

2SC1623

Typical Characteristics

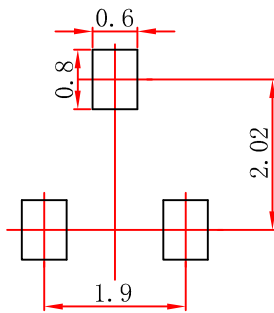


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	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
c	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
e	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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.