

NPN Transistors

2SC1623-HF

■ Features

- High DC Current Gain:
hFE = 200 TYP.
VCE = 6.0 V, IC = 1.0 mA
- High Voltage: VCE0 = 50 V
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CB0}	60	V
Collector to emitter voltage	V _{CE0}	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

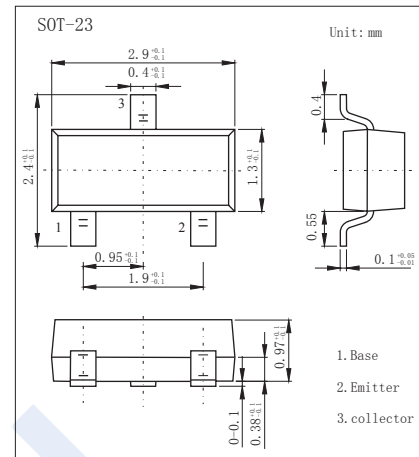
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 100 μA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CE0}	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 _{CB0}	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 = 10 mA		0.15	0.3	V
Base - emitter saturation voltage *	V _{BE(sat)}	I _C = 100 mA, I _B = 10 mA		0.86	1	
Base - emitter voltage *	V _{BE}	V _{CE} = 6 V, I _C = 1 mA	0.55		0.7	
DC current gain *	h _{FE}	V _{CE} = 6 V, I _C = 1 mA	90	200	600	
Collector output capacitance	C _{ob}	V _{CB} = 6 V, I _E = 0, f = 1 MHz		3		pF
Transition frequency	f _T	V _{CE} = 6 V, I _E = -10 mA		250		MHz

*. PW ≤ 350 us, duty cycle ≤ 2%

■ hFE Classification

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



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■ Typical Characteristics

