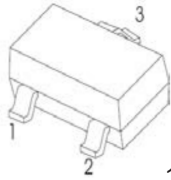




### FEATURES

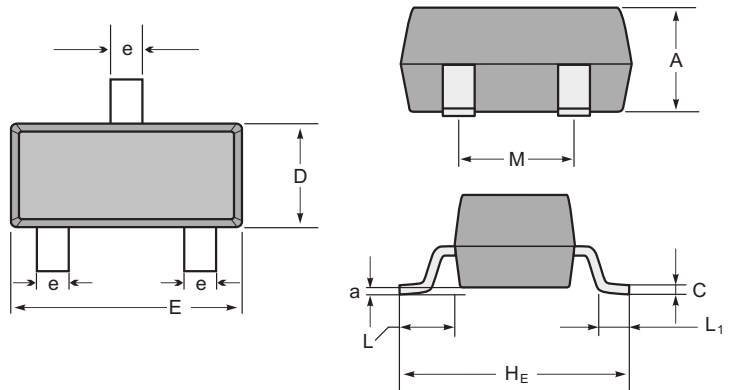
- High DC current gain : $h_{FE}=200$ (Typ)  
 $V_{CE}=6V, I_C=1mA$
- High voltage: $V_{CEO}=50V$



1.BASE  
2.EMITTER  
3.COLLECTOR

### Marking

Type number	Marking code
2SC1623	L4/L5/L6/L7



SOT-23 mechanical data

UNIT	A	C	D	E	H <sub>E</sub>	e	M	L	L <sub>1</sub>	a	
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

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

Parameter	Symbol	Value	Unit
Collector–Base Voltage	$V_{CBO}$	60	V
Collector–Emitter Voltage	$V_{CEO}$	50	V
Emitter–Base Voltage	$V_{EBO}$	5	V
Collector Current — Continuous	$I_C$	100	mA
Collector Power Dissipation	$P_C$	200	mW
Thermal Resistance From Junction To Ambient	$R_{thJA}$	625	°C/W
Operation Junction and Storage Temperature Range	$T_J, T_{stg}$	-55~+150	°C

# 2SC1623

## CLASSIFICATION OF $h_{FE}$

Rank	L4	L5	L6	L7
Range	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

## ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Max	Typ	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 60V, I_E = 0$		0.1		$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$		0.1		$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = 6V, I_C = 1\text{ mA}$	90	600	200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}, I_B = 10\text{ mA}$		0.3		V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100\text{ mA}, I_B = 10\text{ mA}$		1		V
Transition frequency	$f_T$	$V_{CE} = 6V, I_C = 10\text{ mA}$			250	MHz

## RATING AND CHARACTERISTIC CURVES (2SC1623)

