

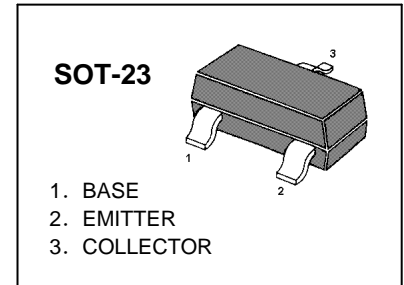
## TRANSISTOR (NPN)

### FEATURE

High DC current gain :  $h_{FE}=200(\text{Typ})$   $V_{CE}=6\text{V}$ ,  $I_C=1\text{mA}$

High voltage:  $V_{CEO}=50\text{V}$

MARKING: L6



### MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

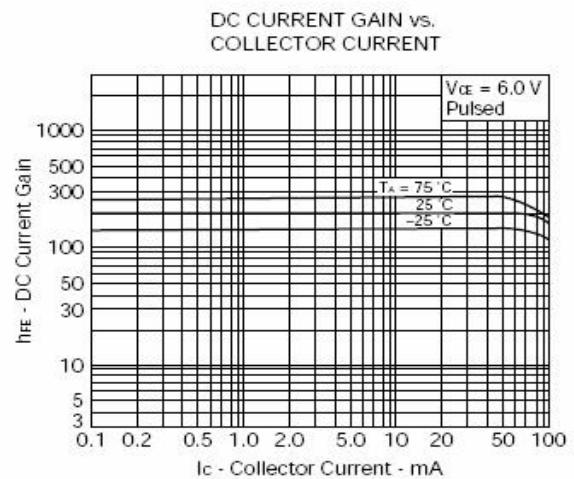
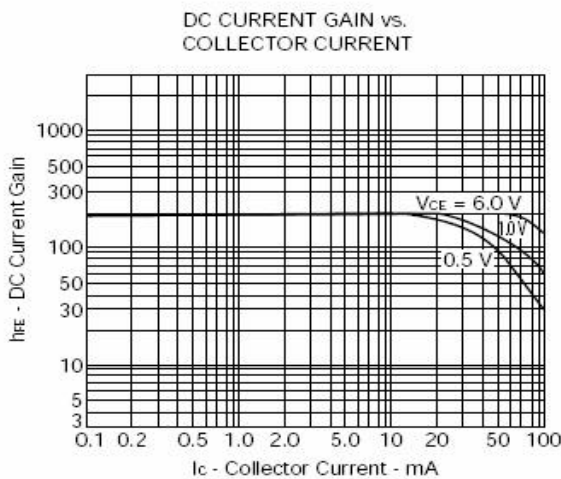
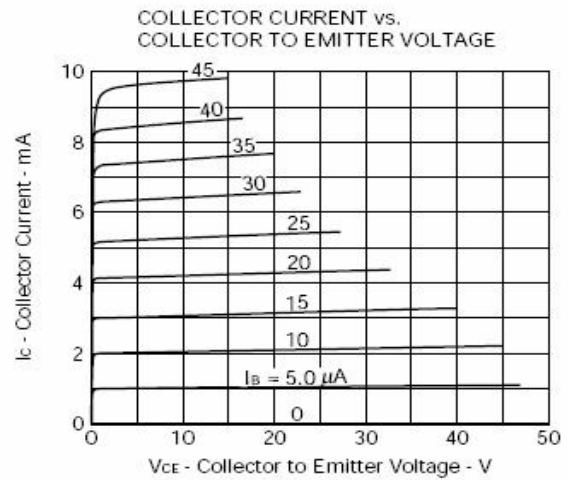
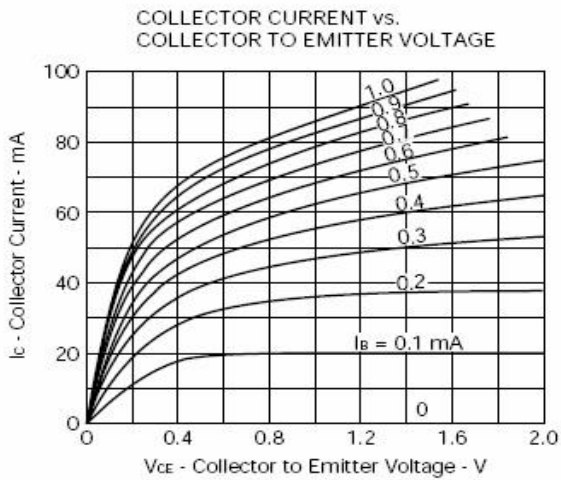
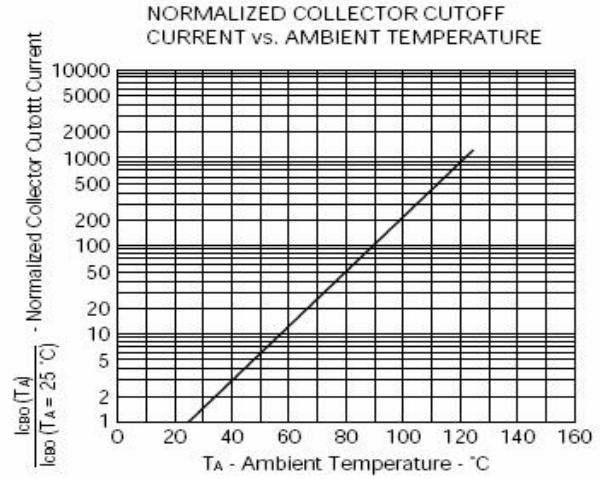
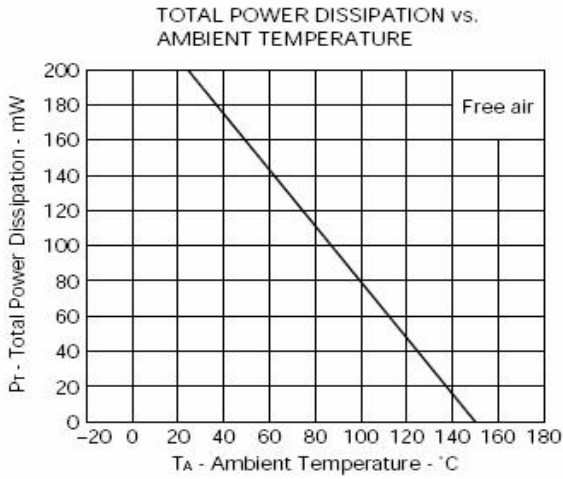
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	100	mA
$P_C$	Collector Power Dissipation	200	mW
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{CB}$	$I_C=100\mu\text{A}$ , $I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{BR-E}$	$I_C=1\text{mA}$ , $I_B=0$	50			V
Emitter-base breakdown voltage	$V_{BR-EB}$	$I_E=100\mu\text{A}$ , $I_C=0$	5			V
Collector cut-off current	$I_C$	$V_{CB}=60\text{V}$ , $I_E=0$			0.1	mA
Emitter cut-off current	$I_{EB}$	$V_{EB}=5\text{V}$ , $I_C=0$			0.1	mA
DC current gain	$h_{FE}$	$V_{CE}=6\text{V}$ , $I_C=1\text{mA}$	200		400	
Collector-emitter saturation voltage	$V_{CE}$	$I_C=100\text{mA}$ , $I_B=10\text{mA}$			0.3	V
Base-emitter saturation voltage	$V_{BE}$	$I_C=100\text{mA}$ , $I_B=10\text{mA}$			1	V
Transition frequency	$f_T$	$V_{CE}=6\text{V}$ , $I_C=10\text{mA}$		250		MHz

## Typical Characteristics

## 2SC1623

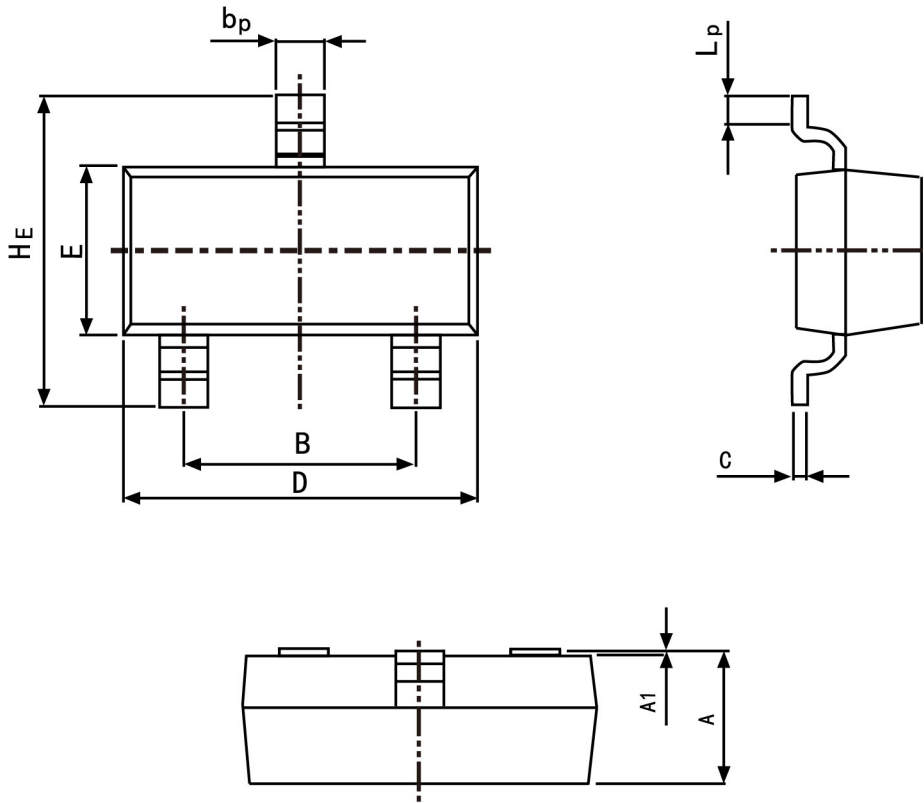




### PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
bp	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
A1	0.100	0.013
Lp	0.20	0.50