

**FEATURES**

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

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

**2SC1623(NPN)**

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	$I_C$	0.1	A
Collector Power Dissipation	$P_C$	0.2	W
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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

CLASSIFICATION OF  $h_{FE}$

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

2SC1623 Typical Characteristics

