



Micro Commercial Components
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2SC1623

Features

- High DC Current Gain: $h_{FE}=200$ TYP. ($V_{CE}=6.0V$, $I_C=1.0mA$)
- High voltage: $V_{CEO}=50V$

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	100	mA
P_C	Collector power dissipation	200	mW
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
OFF CHARACTERISTICS					
I_{CBO}	Collector Cutoff Current ($V_{CB}=60Vdc$, $I_E=0$)	---	---	0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0Vdc$, $I_C=0$)	---	---	0.1	μA

ON CHARACTERISTICS

h_F	DC Current Gain* ($I_C=1.0mA$, $V_{CE}=6.0Vdc$)	90	200	600	---
$V_{CE(sat)}$	Collector Saturation Voltage* ($I_C=100mA$, $I_B=10mA$)	---	0.15	0.3	Vdc
$V_{BE(sat)}$	Base Saturation Voltage* ($I_C=100mA$, $I_B=10mA$)	---	0.86	1.0	Vdc
V_{BE}	Base Emitter Voltage* ($V_{CE}=6.0Vdc$, $I_C=1.0mA$)	0.55	0.62	0.65	Vdc
C_{ob}	Collector Capacitance ($V_{CB}=6.0Vdc$, $I_E=0$, $f=1.0MHz$)	---	3.0	---	pF
f_T	Gain Bandwidth product ($V_{CE}=6.0Vdc$, $I_C=10mA$)	---	250	---	MHz

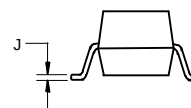
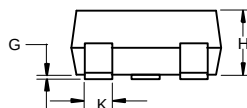
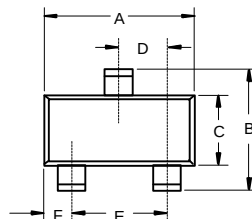
h_{FE} CLASSIFICATION

Marking	L4	L5	L6	L7
h_{FE}	90-180	135-270	200-400	300-600

* Pulse Test $PW < 350\mu s$, duty cycle $< 2\%$

NPN Silicon Epitaxial Transistors

SOT-23



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout

