

Product Summary

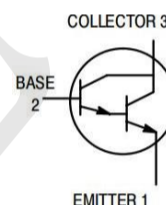
- Darlington connection for a high h_{FE} .
(DC current gain=5000(Min.)@ $V_{CE}=5V$, $I_C=10mA$)
- High input impedance.

Package and Pin Configuration

SOT23-3L



Circuit diagram



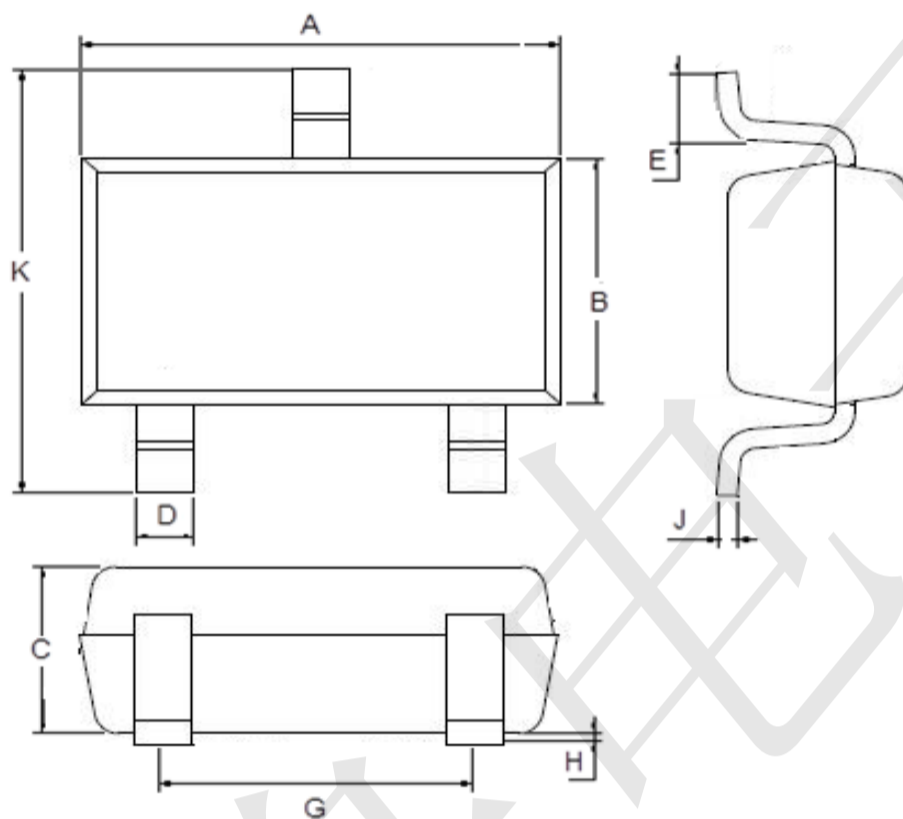
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current -Continuous	I_C	0.3	A
Power Dissipation	P_C	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-50 to +150	°C

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless Otherwise Noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu\text{A}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	10			V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{V}, I_B=0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=10\text{V}, I_C=0$			100	nA
DC current gain	h_{FE1}	$V_{CE}=5\text{V}, I_C=10\text{mA}$	5k			
DC current gain	h_{FE2}	$V_{CE}=5\text{V}, I_C=100\text{mA}$	10k			
Base-emitter on voltage	V_{BEON}	$V_{CE}=5\text{V}, I_C=100\text{mA}$			2.0	V
Collector-emitter saturation voltage	V_{CESAT}	$I_C=100\text{mA}, I_B=0.1\text{mA}$			1.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}; I_C=10\text{mA}; f=100\text{MHz}$	125			MHz

Package Outline Dimensions (SOT23-3L)



SOT-23-3L		
Dimension	Min.	Max.
A	2.80	3.00
B	1.50	1.70
C	1.00	1.20
D	0.35	0.45
E	0.35	0.55
G	1.80	2.00
H	0.02	0.10
J	0.10	0.20
K	2.60	3.00