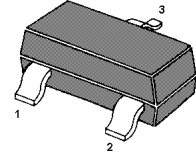


NPN Silicon Epitaxial Planar Transistors

for general purpose applications, darlington transistor.

The transistor is subdivided into one group according to its DC current gain.



1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package

On special request, these transistors can be manufactured in different pin configurations.

MARKING: K3D

Absolute Maximum Ratings ($T_a=25\text{ }^\circ\text{C}$)

	Symbol	Value	Unit
Collector Emitter Voltage	V_{CES}	30	V
Collector Base Voltage	V_{CBO}	30	V
Emitter Base Voltage	V_{EBO}	10	V
Collector Current	I_C	500	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



CHINA BASE
INTERNATIONAL

SOT-23

MMBTA14



www.china-base.com.hk

Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

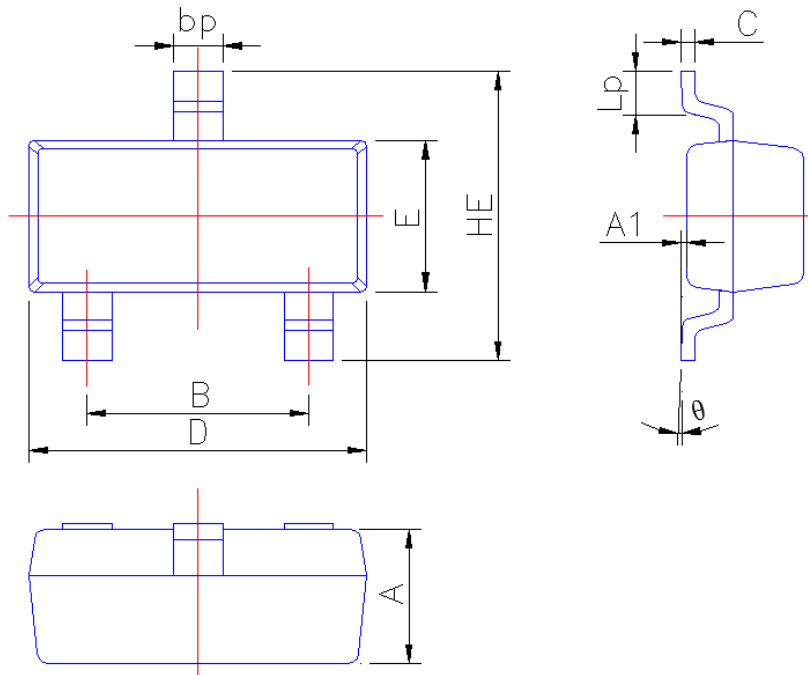
	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{CE}=5\text{V}$, $I_C=10\text{mA}$	h_{FE}	10000	-	-
at $V_{CE}=5\text{V}$, $I_C=100\text{mA}$	h_{FE}	20000	-	-
Collector Emitter Breakdown Voltage				
at $I_C=100\mu\text{A}$	$V_{(BR)CES}$	30	-	V
Collector Cutoff Current				
at $V_{CB}=30\text{V}$	I_{CBO}	-	100	nA
Emitter Cutoff Current				
at $V_{EB}=10\text{V}$	I_{EBO}	-	100	nA
Collector Emitter Saturation Voltage				
at $I_C=100\text{mA}$, $I_B=0.1\text{mA}$	$V_{CE(sat)}$	-	1.5	V
Base Emitter On Voltage				
at $I_C=100\text{mA}$, $V_{CE}=5\text{V}$	$V_{BE(on)}$	-	2	V
Current Gain Bandwidth Product				
at $V_{CE}=5\text{V}$, $I_C=10\text{mA}$, $f=100\text{MHz}$	f_T	125	-	MHz



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°