

## Descriptions

- High current application

## Features

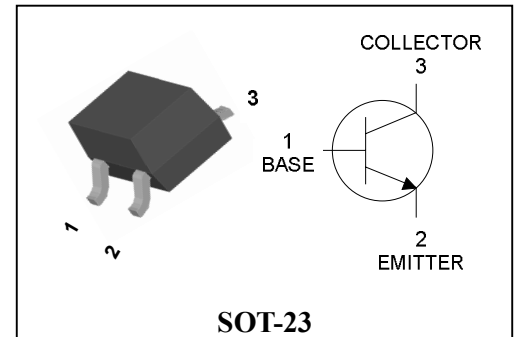
- Complementary pair with KS8550L

## Ordering Information

Type NO.	Marking	Package Code
KS8050L	KK □ □ ● ① ② ③	SOT-23

①Device Code ②HFE Grade ③Year& Week Code ●AUK Dalian

## PIN Connection



## Absolute maximum ratings

$T_a=25^\circ\text{C}$

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	$V_{\text{CBO}}$	40	V
Collector-Emitter voltage	$V_{\text{CEO}}$	25	V
Emitter-base voltage	$V_{\text{EBO}}$	6	V
Collector current	$I_{\text{C}}$	1500	mA
Collector dissipation	$P_{\text{C}}$	350	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature range	$T_{\text{stg}}$	-55~150	$^\circ\text{C}$

## Electrical Characteristics

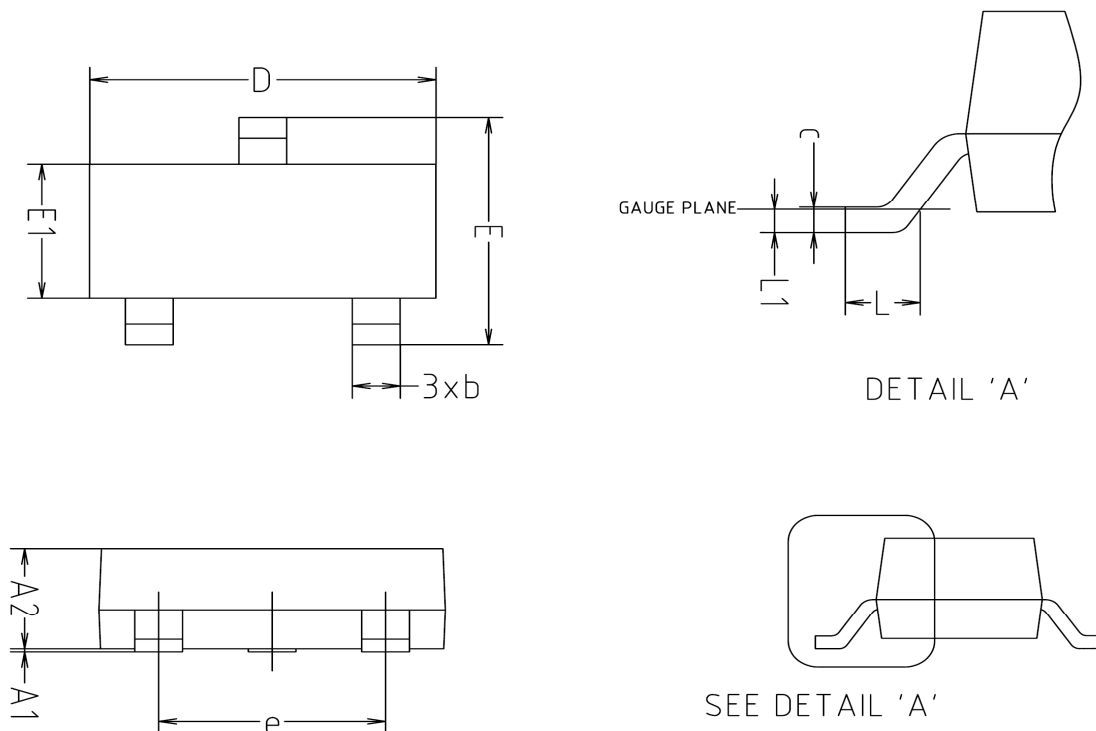
$T_a=25^\circ\text{C}$

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	$BV_{\text{CBO}}$	$I_{\text{C}}=100\mu\text{A}, I_{\text{E}}=0$	40	-	-	V
Collector-Emitter breakdown voltage	$BV_{\text{CEO}}$	$I_{\text{C}}=2\text{mA}, I_{\text{B}}=0$	25	-	-	V
Emitter-Base breakdown voltage	$BV_{\text{EBO}}$	$I_{\text{E}}=100\mu\text{A}, I_{\text{C}}=0$	6	-	-	V
Collector cut-off current	$I_{\text{CBO}}$	$V_{\text{CB}}=35\text{V}, I_{\text{E}}=0$	-	-	0.1	$\mu\text{A}$
Emitter cut-off current	$I_{\text{EBO}}$	$V_{\text{EB}}=6\text{V}, I_{\text{C}}=0$	-	-	0.1	$\mu\text{A}$
DC current gain	$h_{\text{FE1}}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=100\text{mA}$	85	-	300	-
	$h_{\text{FE2}}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=800\text{mA}$	40	-	-	-
Collector-Emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=800\text{mA}, I_{\text{B}}=80\text{mA}$	-	-	0.5	V
Base-Emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}}=800\text{mA}, I_{\text{B}}=80\text{mA}$	-	-	1.2	V
Base-Emitter voltage	$V_{\text{BE}}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=10\text{mA}$	-	-	1.0	V
Transition frequency	$f_{\text{T}}$	$V_{\text{CE}}=10\text{V}, I_{\text{C}}=50\text{mA}$	100	-	-	MHz

HFE Grade:

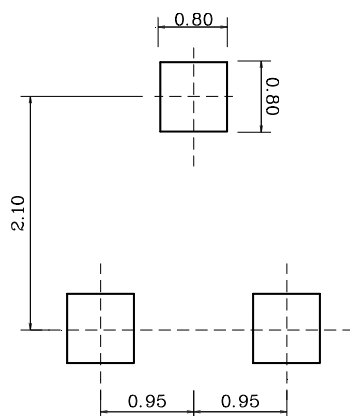
Rank	B	C	D
Range	85~160	120~200	160~300
Mark Name	KKB	KKC	KKD

## Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A1	0.00	-	0.10	
A2	0.82	-	1.02	
b	0.39	0.42	0.45	
c	0.09	0.12	0.15	
D	2.80	2.90	3.00	
E	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
e	1.90BSC			
L	0.20	-	-	
L1	0.12BSC			

※Recommend PCB solder land [Unit: mm]



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