

## NPN Silicon Epitaxial Planar Transistor

## KTC3876

### FEATURES

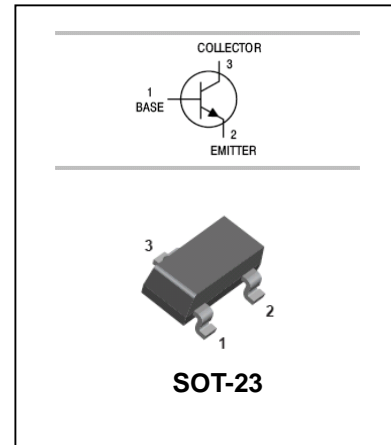
- Complementary To KTA1505.
- Excellent  $H_{FE}$  Linearity.
- Low noise.



Lead-free

### APPLICATIONS

- General purpose application, switching application.



### ORDERING INFORMATION

Type No.	Marking	Package Code
KTC3876	WO•WY•WG•	SOT-23

### MAXIMUM RATING @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	35	V
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	500	mA
$P_C$	Collector Power Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

## NPN Silicon Epitaxial Planar Transistor

## KTC3876

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=35V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=1V, I_C=100mA$	70		400	
		$V_{CE}=6V, I_C=400mA$ O	25			
		Y	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$			0.25	V
Transition frequency	$f_T$	$V_{CE}=6V, I_C=20mA$		300		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1MHz$		7		pF

### CLASSIFICATION OF $h_{FE}$

Rank	O	Y	G
Range	70-140	120-240	200-400
Marking	WO	WY	WG

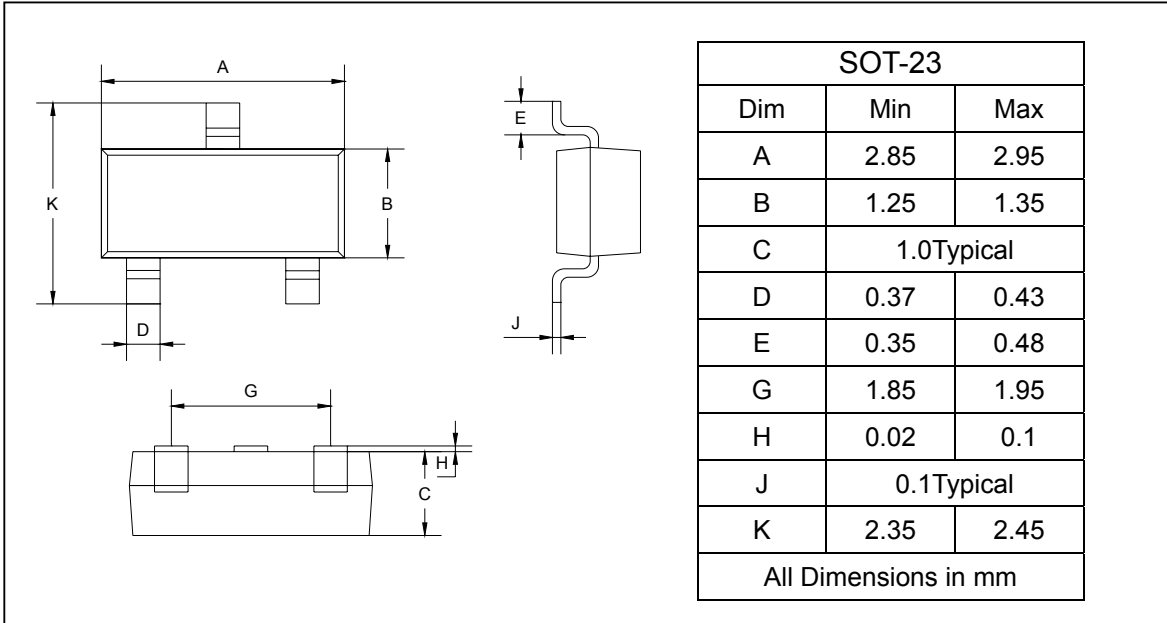
## NPN Silicon Epitaxial Planar Transistor

## KTC3876

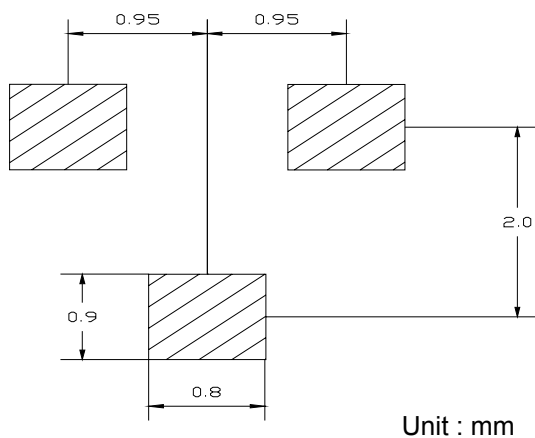
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
KTC3876	SOT-23	3000/Tape&Reel