

## NPN Silicon Epitaxial Planar Transistor

## KTC3880

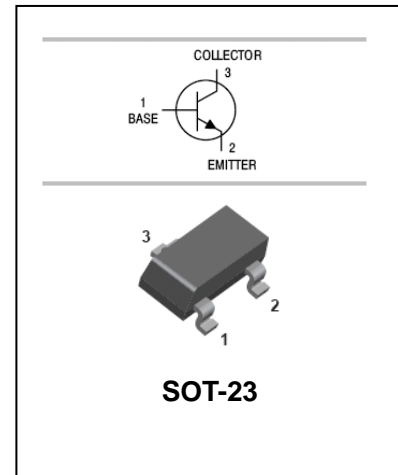
### FEATURES

- Small reverse transfer capacitance.
- Low noise figure.



### APPLICATIONS

- High frequency Low noise amplifier application.
- VHF band amplifier application.



### ORDERING INFORMATION

Type No.	Marking	Package Code
KTC3880S	AQR/AQO/AQY	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	40	V
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	4	V
$I_C$	Collector Current	20	mA
$I_E$	Emitter Current	-20	mA
$P_C$	Collector Power Dissipation	150	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	°C

**NPN Silicon Epitaxial Planar Transistor****KTC3880****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=18V, I_E=0$			0.5	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			0.5	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	40		200	
Transition frequency	$f_T$	$V_{CE}=6V, I_C=1mA$		500		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1MHz$		1		pF
Noise figure	NF	$V_{CC}=6V, I_E=1mA, f=100KHz$		2.5	5.0	dB

**CLASSIFICATION OF  $h_{FE}$** 

Rank	R	O	Y
Range	40-80	70-140	100-240
Marking	AQR	AQO	AQY

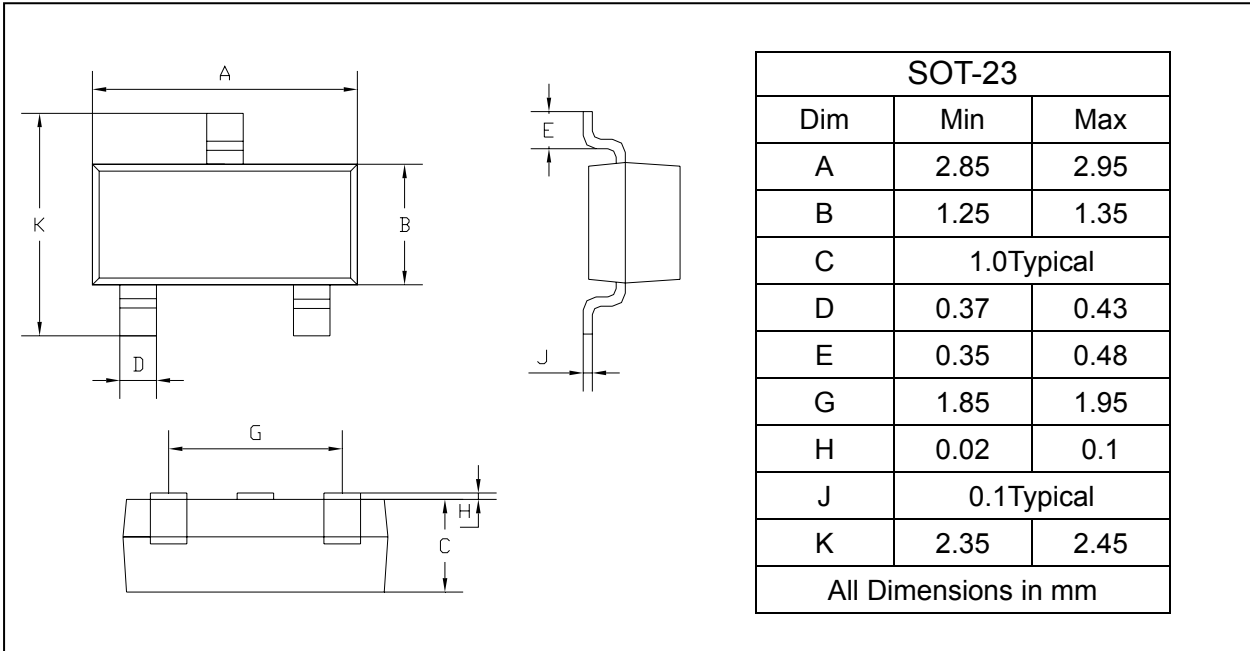
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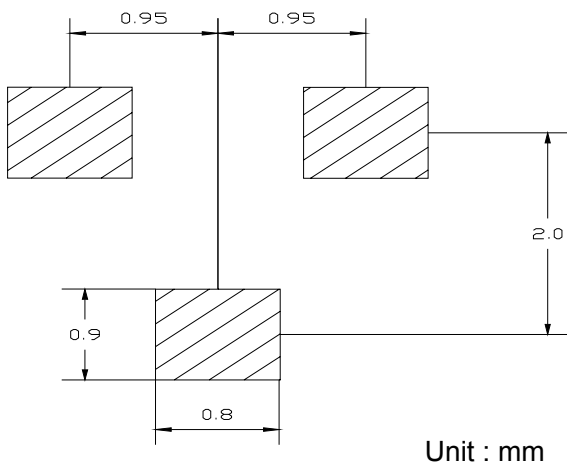
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
KTC3880S	SOT-23	3000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)