

NPN Silicon Epitaxial Planar Transistor

KTC3880S

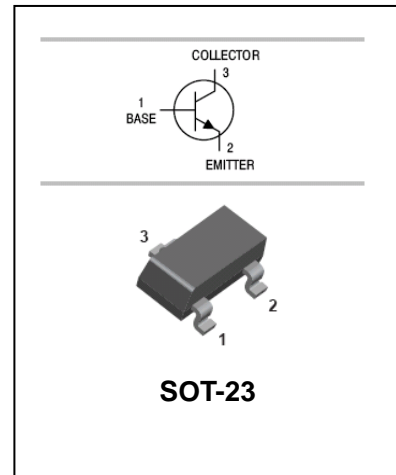
FEATURES

- 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
KTC3879	RR/RO/RV	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

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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	$V_{(BR)CEO}$	$I_C=100\mu A, I_B=0$	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	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.5	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=2mA$	40		240	
Transition frequency	f_T	$V_{CE}=6V, I_C=1mA$	300	550		MHz
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

PACKAGE OUTLINE

Plastic surface mounted package

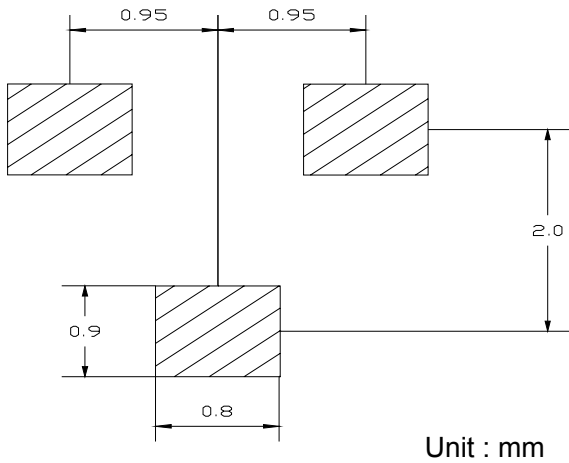
SOT-23

SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

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SOLDERING FOOTPRINT



PACKAGE INFORMATION

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