



## SOT-23 Plastic-Encapsulate Transistors

### **KTC3880S** TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$P_{CM}$ : 150 mW ( $T_{amb}=25^{\circ}C$ )

Collector current

$I_{CM}$ : 20 mA

Collector-base voltage

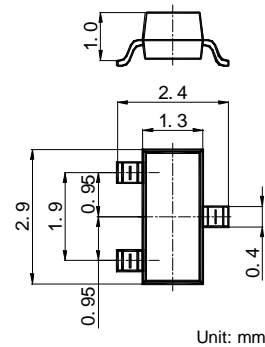
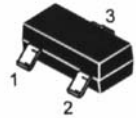
$V_{(BR)CBO}$ : 40 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

#### SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ 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	$h_{FE(1)}$	$V_{CE}=6V, I_C=1mA$	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	$V_{CE}=6V, I_C=1mA, f=100MHz$			5	dB

#### CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y
Range	40-80	70-140	100-200
Marking	AQR	AQO	AQY