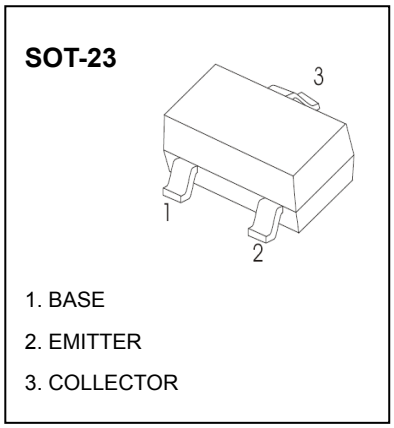
SOT-23 Plastic-Encapsulate Transistors

KTC3880 TRANSISTOR (NPN)



FEATURES

- Small reverse transfer capacitance, low noise figure.
- High frequency low noise amplifier.

■ Classification of h_{fe}

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	20	mA
Emitter Current	I_E	-20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=18V I_E=0		0.5		μ A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0		0.5		μ A
DC Current Gain	h_{FE}	V_{CE}=6.0V I_C=1.0mA	40	200		
Reverce Transfer Capacitance	C_{re}	V_{CE}=6.0V f=1.0MHz		0.7		pF
Transition Frequency	f_T	V_{CE}=6.0V I_C=1.0mA		550		MHz
Collector- Base Time Constant	Cc.rbb	V_{CE}=6.0V I_E=1.0mA f=30MHz			30	pS
Noise Figure	NF	V_{CE}=6.0V I_C=0.1mA f=100MHz	2.5		5.0	dB
Power Gain	Gpe	V_{CE}=6.0V I_C=0.1mA f=100MHz	15	18		dB

Typical Characteristics