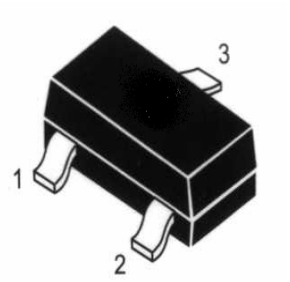
KTC3875 NPN EPITAXIAL SILICON TRANSISTOR

General purpose application

* Complement to KTA1504
* Collector Current :Ic=150mA
* low noise:NF=10db(max)

Package:SOT-23



PIN: / STYLE	1	2	3
NO.1	B	E	C

ABSOLUTE MAXIMUM RATINGS at Ta=25℃

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	60	V
Collector-Emitter Voltage	Vceo	50	V
Emitter-Base Voltage	Vebo	5	V
Collector Current	Ic	150	mA
Collector Dissipation Ta=25℃*	P_D	225	mW
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55-150	℃

ELECTRICAL CHARACTERISTICS at Ta=25℃

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	60			V	Ic=100uA Ie=0
Collector-Emitter Breakdown Voltage#	BVceo	50			V	Ic= 1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	5.0			V	Ie= 100uA Ic=0
Collector-Base Cutoff Current	Icbo			100	nA	Vcb= 60V Ie=0
Emitter-Base Cutoff Current	Iebo			100	nA	Veb= 5V Ic= 0
DC Current Gain	Hfe	70		700		Vce= 6V Ic= 2mA
Collector output capacitance	Cob		2.0	3.5	PF	Vce= 10V Ie=0 f=1MHz
Noise Figure	NF		1.0	10	db	Vce= 6V Ic= 0.1mA, f=1KHz,Rg=10kΩ
Collector-Emitter Saturation Voltage	Vce(sat)		0.1	0.25	V	Ic= 100mA Ib= 10mA

* Total Device Dissipation : FR=1X0.75X0.062in Board,Derate 25℃.

Pulse Test : Pulse Width ≤300uS,Duty cycle ≤2%

DEVICE MARKING:

KTC3875=1E

h_{FE} Classification

h_{FE}	70-140	120—240	200—400	350—700