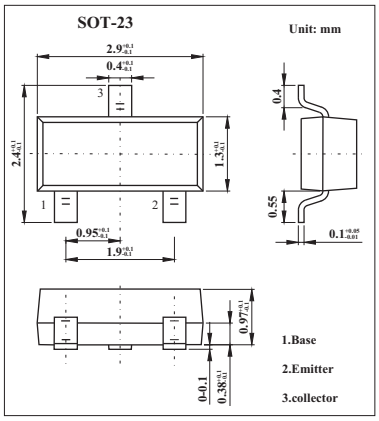
Epitaxial Planar NPN Transistor

KTC3875



Features

Excellent h_{FE} Linearity

$h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(Typ.)$.

Low Noise : NF=1dB(Typ.), 10dB(Max.).

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	V_{CB}=60V, I_E=0			0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=6V, I_C=2mA	70			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA		0.1	0.25	V
Transition Frequency	f_T	V_{CE}=10V, I_C=1mA	80		700	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz		2.0	3.5	pF
Noise Figure	NF	V_{CE}=6V, I_C=0.1mA f=1kHz, Rg=10KΩ		1.0	10	dB

h_{FE} Classification

Marking	ALO	ALY	ALG	ALL
Rank	O	Y	GR	L
h_{FE}	70 140	120 240	200 400	350 700