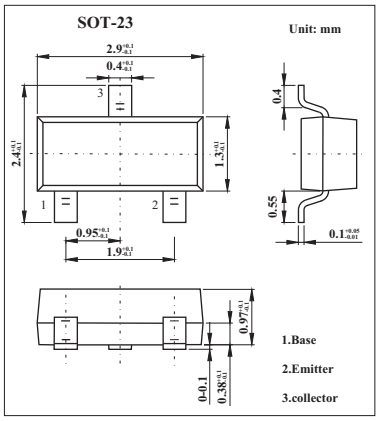
Epitaxial Planar NPN Transistor

KTC4075



Features

Collector Power Dissipation: P_C=100mW

Collector Current: I_C=150mA

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	100	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	60			
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	50			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	5			
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		700	
Transition Frequency	f_T	V_{CE}=10V, I_C=1mA	80			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz			3.5	pF
Noise Figure	NF	V_{CE}=6V,I_C=0.1mA,f=1KHz, R_G=10KΩ			5.0	dB

h_{FE} Classification

Marking	LO1	LYT	LG1	LL1
Rank	O	Y	G	L
h_{FE}	70 140	120 240	200 400	350 700