

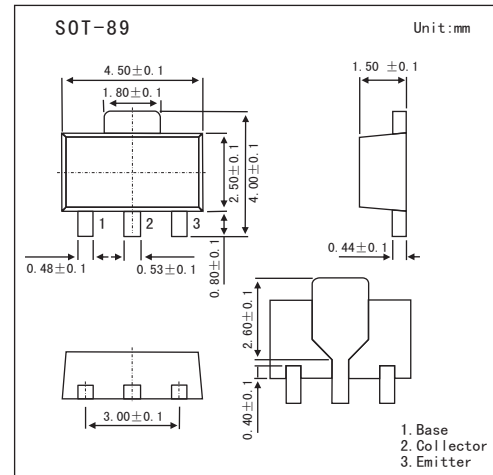
Epitaxial Planar NPN Transistor

KTC4376

Features

Collector Power Dissipation: $P_c=500\text{mW}$

Collector Current: $I_c=800\text{mA}$



Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	35	V
Collector-Emitter voltage	V_{CE0}	30	V
Emitter-base voltage	V_{EB0}	5	V
Collector Current	I_c	800	mA
Collector Power Dissipation	P_c	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	$^\circ\text{C}$

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_c = 1\text{mA}, I_E = 0$	35			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_c = 10\text{mA}, I_B = 0$	30			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1\text{mA}, I_c = 0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 35\text{V}, I_E = 0$			100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_c = 0$			100	nA
DC Current Gain	h_{FE}	$V_{CE} = 1\text{V}, I_c = 100\text{mA}$	100		320	
		$V_{CE} = 1\text{V}, I_c = 700\text{mA}$	35			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = 500\text{mA}, I_B = 20\text{mA}$			0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 1\text{V}, I_c = 10\text{mA}$			0.8	V
Transition frequency	f_T	$V_{CE} = 5\text{V}, I_c = 10\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		13		pF

h_{FE} Classification

Marking	PO	PY
Rank	O	Y
Range	100 200	160 320