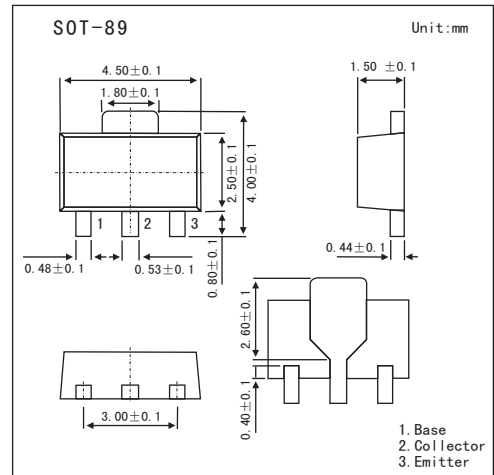


KTC4378

■ Features

- Collector Power Dissipation: $P_C=500\text{mW}$
- Collector Current: $I_C=1\text{A}$

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-Emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
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	$V_{(BR)CBO}$	$I_C=1\text{mA}$, $I_E=0$	80			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}$, $I_B=0$	60			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}$, $I_C=0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=50\text{V}$, $I_E=0$			100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4\text{V}$, $I_C=0$			100	nA
DC Current Gain	h_{FE}	$V_{CE}=2\text{V}$, $I_C=50\text{mA}$	100		320	
		$V_{CE}=2\text{V}$, $I_C=1\text{A}$	30			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$			1.2	V
Transition frequency	f_T	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		12		pF

■ hFE Classification

Marking	TY	TGR
Rank	Y	GR
Range	100~200	160~320