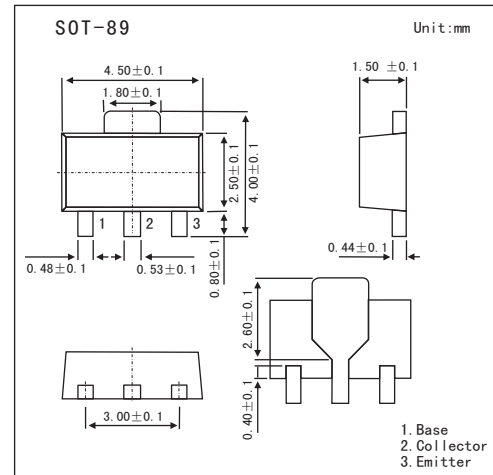


Epitaxial Planar NPN Transistor

KTC4374

■ Features

- Collector Power Dissipation: $P_c=500\text{mW}$
- Collector Current: $I_c=400\text{mA}$



■ 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}	80	V
Emitter-base voltage	V_{EBO}	5	V
Collector Current	I_c	400	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	$V_{(BR)CBO}$	$I_c = 1\text{mA}, I_E = 0$	80			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_c = 10\text{mA}, I_B = 0$	80			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1\text{mA}, I_c = 0$	5			V
Collector Cut-off Current	I_{CB0}	$V_{CB} = 80\text{V}, I_E = 0$			100	nA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = 5\text{V}, I_c = 0$			100	nA
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_c = 50\text{mA}$	70		240	
		$V_{CE} = 2\text{V}, I_c = 200\text{mA}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = 200\text{mA}, I_B = 20\text{mA}$			0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 2\text{V}, I_c = 5\text{mA}$			0.8	V
Transition frequency	f_T	$V_{CE} = 10\text{V}, I_c = 10\text{mA}$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		10		pF

■ h_{FE} Classification

Marking	EO	EY
Rank	O	Y
Range	70~140	120~240