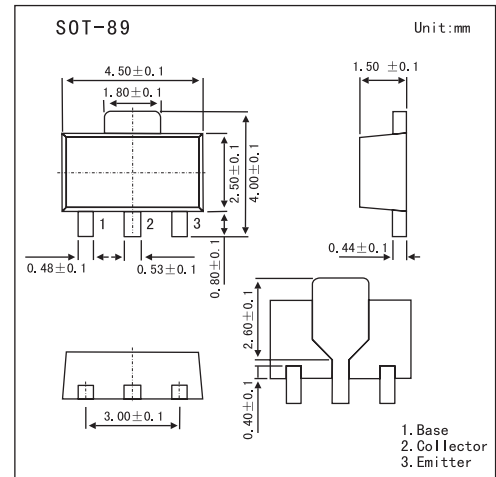


Silicon NPN Epitaxial Planar Type

2SD874,2SD874A

■ Features

- Large collector power dissipation P_C .
- Low collector-emitter saturation voltage $V_{CE(sat)}$.
- Mini power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage	V_{CB0}	2SD874	30	V
		2SD874A	60	V
Collector-emitter voltage	V_{CE0}	2SD874	25	V
		2SD874A	50	V
Emitter-base voltage	V_{EB0}	5	V	
Collector current	I_C	1	A	
Peak collector current	I_{CP}	1.5	A	
Collector power dissipation	P_C	1	W	
Junction temperature	T_J	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

2SD874,2SD874A

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base voltage	2SD874	Ic = 10 μ A, IE = 0	30			V
	2SD874A		60			V
Collector-emitter voltage	2SD874	Ic = 2 mA, IB = 0	25			V
	2SD874A		50			V
Emitter-base voltage	VEBO	IE = 10 μ A, Ic = 0	5			V
Collector-base cutoff current	ICBO	VCB = 20 V, IB = 0			0.1	μ A
Forward current transfer ratio	hFE	VCE = 10 V, Ic = 500 mA	85		340	?
Collector-emitter saturation voltage	VCE(sat)	Ic = 500 mA, IB = 50 mA		0.2	0.4	V
Base-emitter saturation voltage	VBE(sat)	Ic = 500 mA, IB = 50 mA		0.85	1.2	V
Transition frequency	fT	VCB = 10 V, IE = -50 mA, f = 200 MHz		200		MHz
Collector output capacitance	Cob	VCB = 10 V, IE = 0, f = 1 MHz			20	pF

■ hFE Classification

Marking	2SD874:Z, 2SD874A:Y		
Rank	Q	R	S
hFE	85~170	120~240	170~340