



## DESCRIPTION

The 2SD874A is available in SOT-89 package

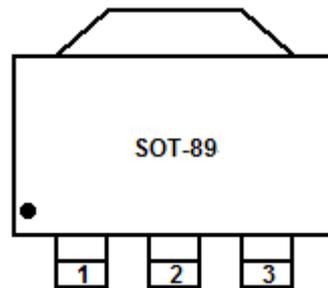
## FEATURES

- Available in SOT-89 package

## ORDERING INFORMATION

Package Type	Part Number
SOT-89	2SD874A
Note	SPQ: 1,000pcs/Reel
AiT provides all RoHS Compliant Products	

## PIN DESCRIPTION



1. BASE
2. COLLECTOR
3. EMITTER



## ABSOLUTE MAXIMUM RATINGS

V <sub>CEO</sub> , Collector-Emitter Voltage(I <sub>B</sub> =0)	32V
V <sub>CBO</sub> , Collector-Base Voltage(I <sub>E</sub> =0)	40V
V <sub>EBO</sub> , Emitter-Base Voltage(I <sub>C</sub> =0)	6V
I <sub>C</sub> , Collector Current	1A
P <sub>TOT</sub> , Total Device Dissipation(T <sub>A</sub> =25°C) <sup>NOTE1</sup>	1W
T <sub>JM</sub> , Junction Temperature(Max)	150°C
T <sub>STG</sub> , Storage Temperature	-55°C ~150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1: Device mounted on a printed circuit board.

## ELECTRICAL CHARACTERISTICS

T<sub>A</sub>=25°C, unless otherwise specified.

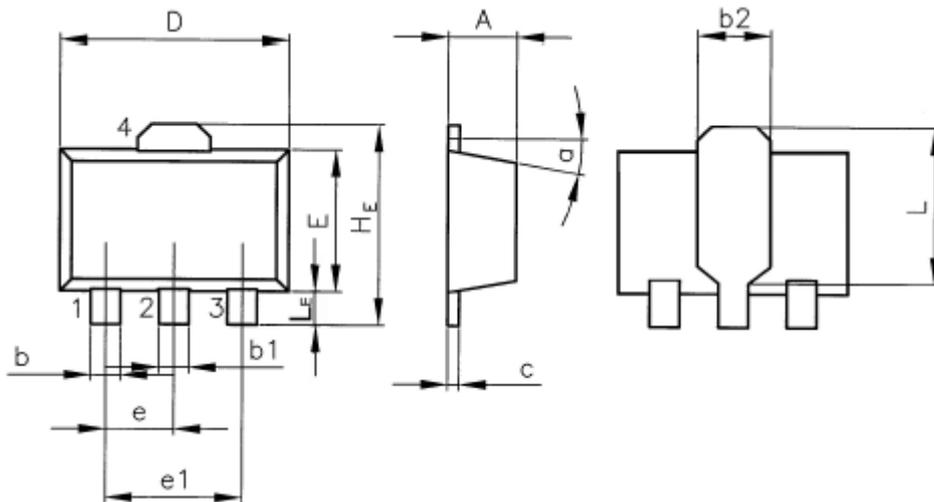
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	32			V
	V <sub>(BR)CBO</sub>	I <sub>C</sub> =50μA, I <sub>E</sub> =0	40			V
	V <sub>(BR)EBO</sub>	I <sub>E</sub> =50μA, I <sub>C</sub> =0	6			V
Collector-Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0			500	nA
DC Current Gain	h <sub>FE</sub>	I <sub>C</sub> =100mA, V <sub>CE</sub> =3.0V	120		240	-
Collector- Emitter Saturation Voltage <sup>NOTE2</sup>	V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA			0.50	V
Current Gain-Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> =50mA, V <sub>CE</sub> =5V	150			MHz

NOTE2: Pulse test; pulse width≤300μs, duty cycle≤2%.



## PACKAGE INFORMATION

Dimension in SOT-89 (Unit: mm)



Symbol	Min	Typ	Max
A	-	1.500	-
b	-	-	0.650
b1	-	-	0.650
b2	-	1.600	-
c	0.250	-	-
D	-	4.500	-
E	-	-	2.600
e	-	1.500	-
e1	-	3.000	-
HE	-	-	4.250
L	2.600	-	2.950
LE	0.800	-	1.200
$\alpha$	-	-	10°



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