

**DESCRIPTION**

The 2SB799 is available in the SOT-89 package.

APPLICATION

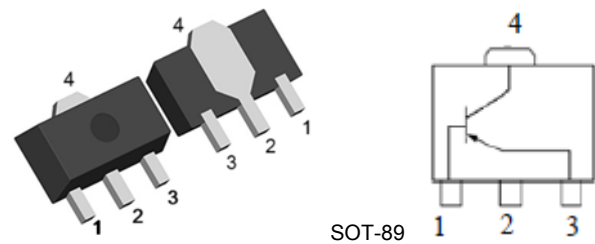
Switching and Amplifying in various electrical and electronic circuits.

ORDERING INFORMATION

Package Type	Part Number
SOT-89	2SB799
SPQ	1,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURE

- Low Collector Saturation Voltage:
 $V_{CE(SAT)} < -0.5V$ ($I_C = -800mA$, $I_B = -80mA$)
- Complements to NPN type 2SD1000

PIN DESCRIPTION

PIN#	DESCRIPTION
1	Base
2,4	Collector
3	Emitter

ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ C$, unless otherwise specified.

V_{CBO} , Collector-Base Voltage	-40 V
V_{CEO} , Collector-Emitter Voltage	-25 V
V_{EBO} , Emitter-Base Voltage	-6 V
I_C , Collector Current-Continuous	-1.5 A
P_{tot} , Total power dissipation ($T_A = 25^\circ C$) ⁽¹⁾	-1 W
T_J , Junction Temperature	150 °C
T_{stg} , Storage Temperature	-55 ~ +150 °C

(1) Mounted on printed circuit board.

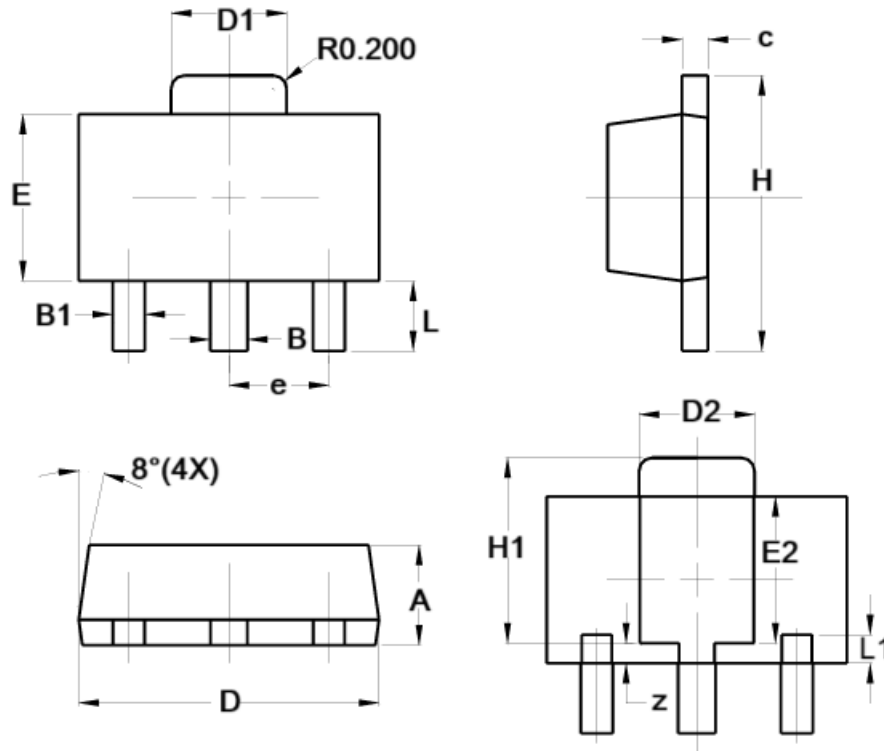
Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods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

**ELECTRICAL CHARACTERISTICS** $T_A = 25^\circ\text{C}$ unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -2\text{ mA}, I_B = 0$	-25	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\text{ }\mu\text{A}, I_E = 0$	-40	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\text{ }\mu\text{A}, I_C = 0$	-6	-	-	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -35\text{ V}, I_E = 0$	-	-	-100	nA
DC Current Gain	h_{FE}	$V_{CE} = -1\text{ V}, I_C = -100\text{ mA}$	200	-	300	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -800\text{ mA}, I_B = -80\text{ mA},$	-	-	-0.5	V
Transition Frequency	f_T	$V_{CE} = 10\text{ V}, I_E = 50\text{ mA}$ $f = 100\text{ MHz}$	200	-	-	MHz

**PACKAGE INFORMATION**

Dimension in SOT-89 (Unit: mm)



Symbol	Millimeter	
	Min.	Max.
A	1.400	1.600
B	0.500	0.620
B1	0.420	0.540
c	0.350	0.430
D	4.440	4.600
D1	1.620	1.830
D2	1.610	1.810
E	2.400	2.600
E2	2.050	2.350
e	1.500 TYP.	
H	3.950	4.250
H1	2.630	2.930
L	0.900	1.200
L1	0.327	0.527
z	0.200	0.400



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