



DESCRIPTION

The BC869 is available in SOT-89package.

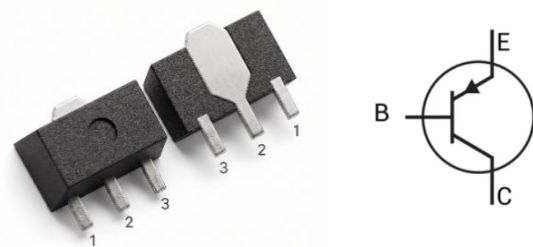
FEATURE

- Low Voltage
- High current
- High power dissipation capability
- NPN Complement to BC869
- Available in SOT-89 package

ORDERING INFORMATION

Package Type	Part Number
SOT-89	BC869-10
	BC869-16
	BC869-25
Note	SPQ: 1,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



PIN#	DESCRIPTION
1	BASE
2	EMITTER
3	COLLECTOR

hFE CLASSIFICATION

Classification	hFE
BC869-10	100 ~ 375
BC869-16	100 ~ 250
BC869-25	160 ~ 375

ABSOLUTE MAXIMUM RATINGS

T_A=25°C Unless otherwise noted

V _{CBO} , Collector-Base Voltage	-32V
V _{CEO} , Collector-Emitter Voltage	-20V
V _{EBO} , Emitter-Base Voltage	-5V
I _C , Collector Current	-1A
P _C , Collector Power Dissipation	500mW
R _{θJA} , Thermal Resistance From Junction To Ambient	250°C/W
T _J , Junction Temperature	150°C
T _{STG} , Storage Temperature Range	-55 ~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.



ELECTRICAL CHARACTERISTICS

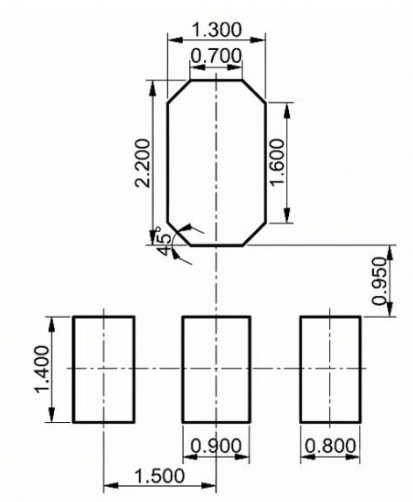
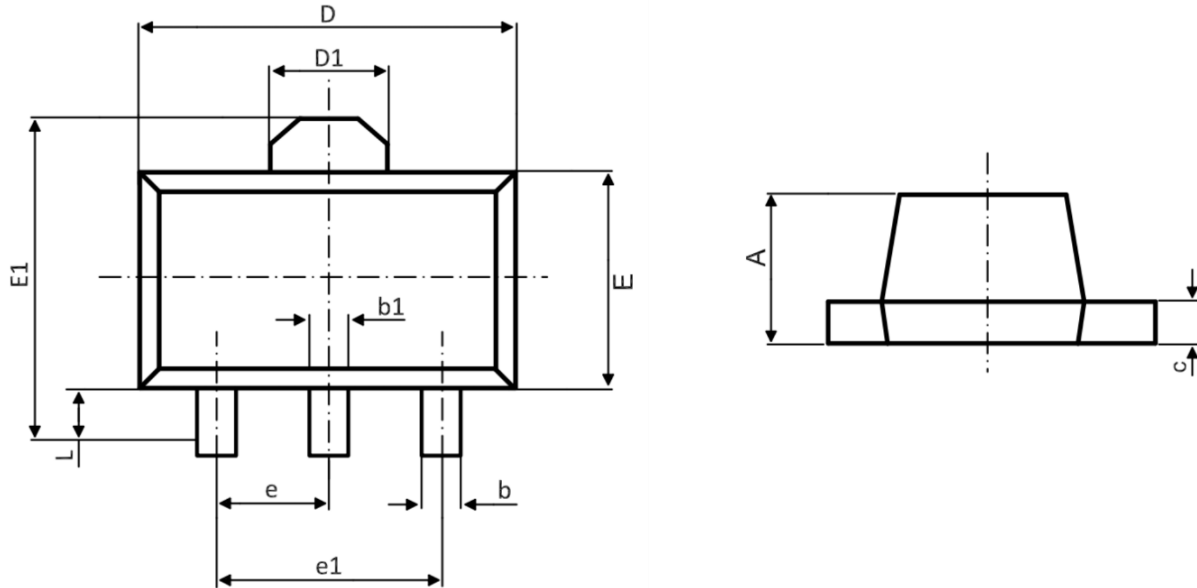
T_A=25°C Unless otherwise noted

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -100μA, I _E = 0	-32			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B = 0	-20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100μA, I _C = 0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -25V, I _E = 0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5V, I _C = 0			-0.1	μA
DC current gain	h _{FE} (1)	V _{CE} = -10V, I _C = -5mA	50			
	h _{FE} (2)	V _{CE} = -1V, I _C = -0.5A	100		375	
	h _{FE} (3)	V _{CE} = -1V, I _C = -1A	60			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -1A, I _B = -0.1A			-0.5	V
Base -emitter voltage	V _{BE}	V _{CE} = -1V, I _C = -1A			-1	V
		V _{CE} = -10V, I _C = -5mA		-0.62		V
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA, f = 100MHz	40			MHz



PACKAGE INFORMATION

Dimension in SOT-89 Package (Unit: mm)



Symbol	Dimensions In Millimeters	
	Min	Max
A	1.400	1.600
b	0.320	0.520
b1	0.400	0.580
c	0.350	0.440
D	4.400	4.600
D1	1.550 REF.	
E	2.300	2.600
E1	3.940	4.250
e	1.500 TYP.	
e1	3.000 TYP.	
L	0.900	1.200



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