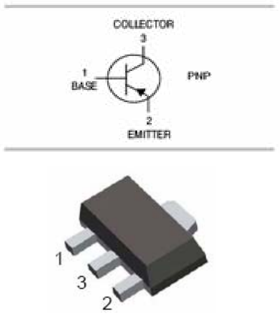
PNP medium power Transistor BC869

FEATURES

- Low voltage.
- High current.

Lead-free



SOT- 89

APPLICATIONS

- Low voltage,high current LF applications.
- Complement to BC868.

ORDERING INFORMATION

Type No.	Marking	Package Code
BC869	CEC/CGC/CHC	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Unit**
V_{CBO}	Collector-Base Voltage	-32	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	DC Collector Current	-1	A
I_{CM}	Peak Collector Current	-2	A
I_{BM}	Peak base current	-200	mA
P_{tot}	Total power dissipation $T_{amb} \leqslant 25$℃	1.35	W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	℃

PNP medium power Transistor BC869

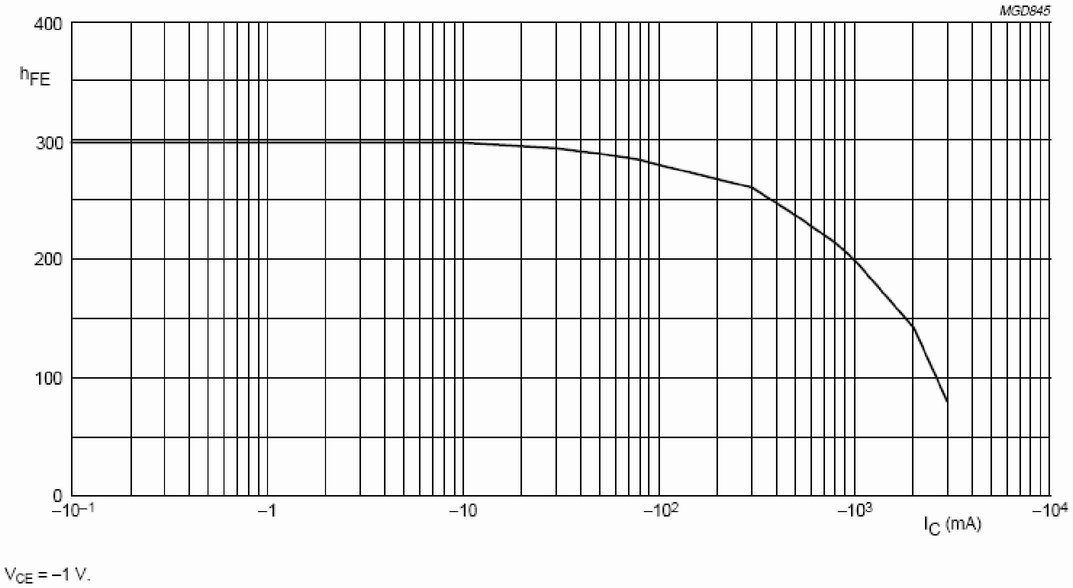
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector cut-off current	I_{CBO}	V_{CB}=-25V I_E=0		-100	nA
		V_{CB}=-25V I_E=0,T_j=150℃		-10	μA
Emmiter cut-off current	I_{EBO}	V_{CE}=-5V I_C=0		-100	nA
DC current gain	h_{FE}	V_{CE}=-10V I_C=-5mA	50		
		V_{CE}=-1V I_C=-500mA			
		BC869	100	375	
		BC869-16	100	160	
		BC869-25	160	375	
		V_{CE}=-1V I_C=-1A	60		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1A I_B=-100mA		-0.5	V
Base-emitter voltage	V_{BE}	I_C=-1A ,V_{CE}=-1V		-1	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-10mA, f=100MHz	40		MHz

CLASSIFICATION H_{FE}

Range	100-375	100-250	160-375
Marking	CEC	CGC	CHC

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

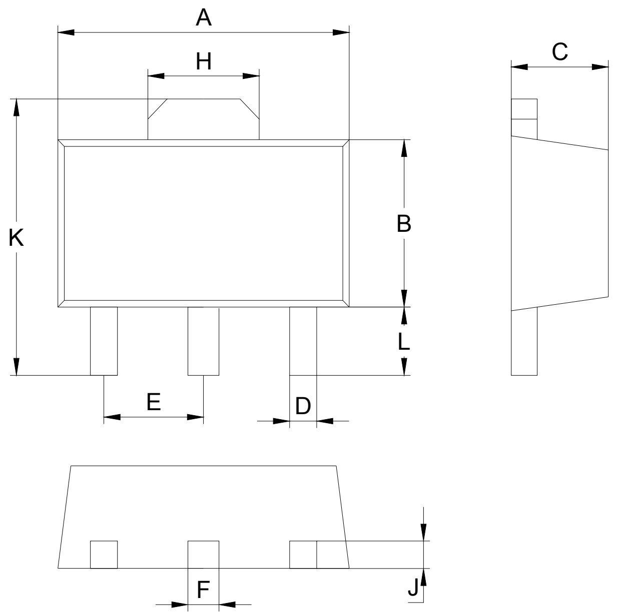


V_{CE} = −1 V.

Fig.1 DC current gain; typical values.

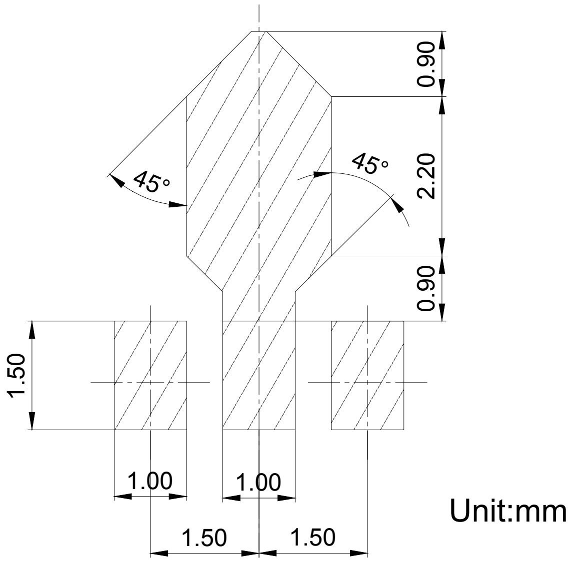
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.50 Typical	
D	0.40 Typical	
E	1.40	1.60
F	0.48 Typical	
H	1.60	1.80
J	0.40 Typical	
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BC869	SOT-89	1000/Tape&Reel