Elektronische Bauelemente

BCP869

PNP

Plastic Encapsulated Transistor

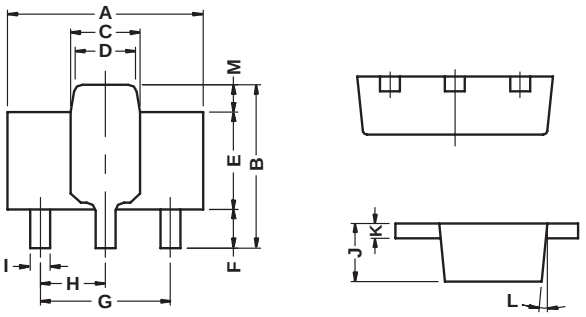
RoHS Compliant Product
A suffix of “-C” specifies halogen & lead-free

FEATURES

The BCP869 is designed for application required for high current (maximum -1 A) and low voltage (maximum -20 V).

PACKAGE DIMENSIONS

SOT-89



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	-32	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-1	A
Collector Dissipation	P_C	0.5	W
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

PNP ELECTRICAL CHARACTERISTICS at Ta = 25°C

Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-32	-	V	I_C=-0.1mA, I_E=0
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-20	-	V	I_C= -1mA, I_B=0
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-5	-	V	I_E=-0.1mA, I_C=0
Collector cut-off current	I_{CBO}	-	-0.1	μA	V_{CB}=-25V, I_E=0
Emitter cut-off current	I_{EBO}	-	-0.1	μA	V_{EB}=-5 V, I_C=0
DC current gain	$h_{FE(1)}$	50	-		V_{CE}=-10V, I_C= -5mA
	$h_{FE(2)}$	100	375		V_{CE}=-1V, I_C= -500mA
	$h_{FE(3)}$	60	-		V_{CE}=-1V, I_C= -1A
Base-emitter voltage	VBE	-	-1	V	V_{CE}=-1V, I_C= -1A
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-0.5	V	I_C=-1A, I_B= -100mA
Transition frequency	f_T	40	-	MHz	V_{CE}=-5V, I_C=-10mA, f = 100MHz

CLASSIFICATION OF hFE2

Rank	BC869	BC869-16	BC869-25
Range	100 – 375	100 - 250	160 – 375
Marking	CEC	CGC	CHC

CHARACTERISTIC CURVES

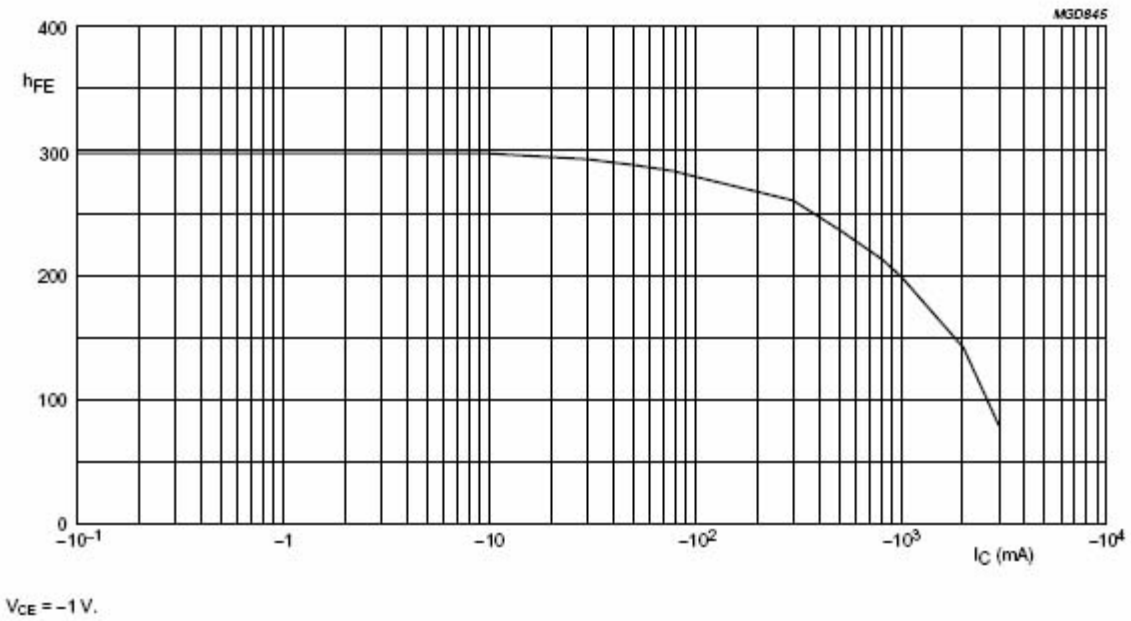


Fig.2 DC current gain; typical values.