BCP882

NPN Silicon
Epitaxial Planar Transistor

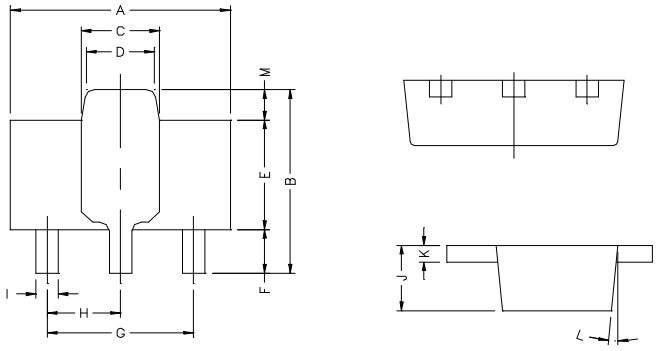
Elektronische Bauelemente

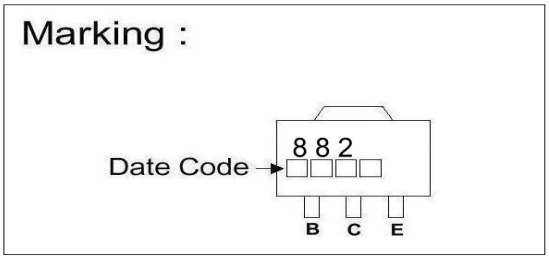
RoHS Compliant Product

SOT-89

Description

The BCP882 is suited for the output stage of 1.5W audio, voltage regulator, and relay driver.





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	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 T_A=25°C

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	3	A
P_D	Total Power Dissipation	1.2	W
T_J,T_{stg}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	40	-	-	V	I_C=100μA,I_E=0
Collector-Emitter Breakdown Voltage	BV_{CEO}	30	-	-	V	I_C= 1mA,I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	5	-	-	V	I_E= 10μA
Collector-Base Cutoff Current	I_{CBO}	-	-	1	uA	V_{CB}= 30V
Emitter-Base Cutoff Current	I_{EBO}	-	-	1	uA	V_{EB}=3V
Collector Saturation Voltage	V_{CE}(sat)	-	-	0.5	V	I_C=2A,I_B=0.2A
Base-Emitter Saturation Voltage	V_{BE}(sat)	-	-	2	V	I_C=2A,I_B=0.2A
DC Current Gain	h_{FE1}	30	-	-		V_{CE}= 2V, I_C=20mA
	h_{FE2}	100	-	500		V_{CE}= 2V, I_C=1A
Gain-Bandwidth Product	fT	-	90	-	MHz	V_{CE}= 5V, I_C= 0.1A,f=100MHz
Output Capacitance	C_{ob}	-	45	-	pF	V_{CB}=10V, f=1MHz,I_E=0

Classification of hFE

Rank	Q	P	E
Range	100~200	160~320	250~500

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Characteristics Curve