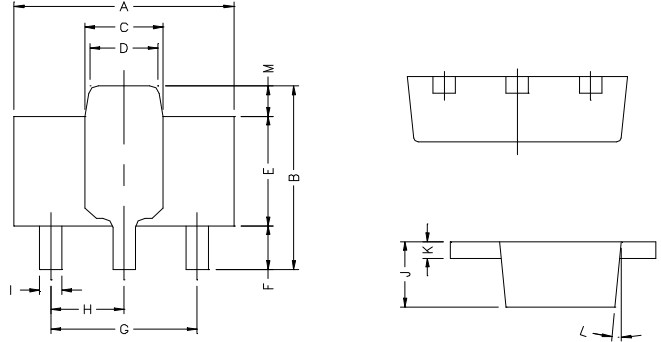


RoHS Compliant Product

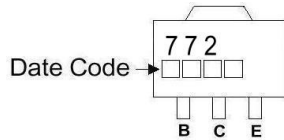
SOT-89

Description

The BCP772 is designed for using in output stage of amplifier, voltage regulator, DC-DC converter and relay driver.



Marking :



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 (unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V _{CBO}	-40	V
Collector to Emitter Voltage	V _{CEO}	-30	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collect Current	I _C	-3	A
Total Power Dissipation (T _C =25°C)	P _D	1.2	W
Operating Junction and Storage Temperature Range	T _j , T _{stg}	-55~+150	°C

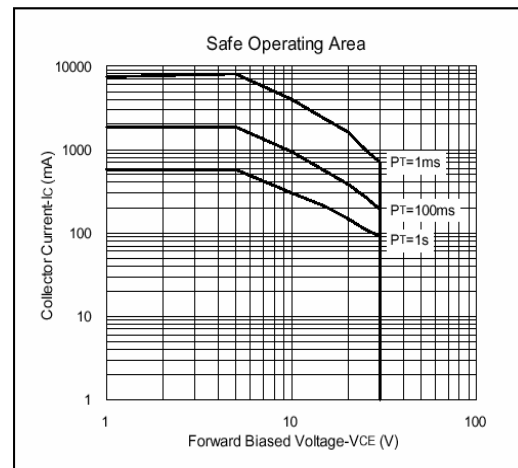
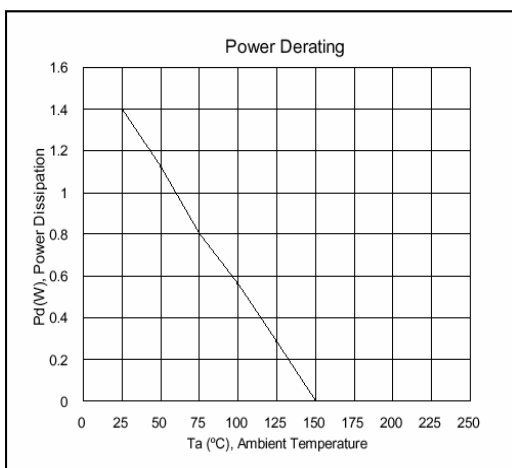
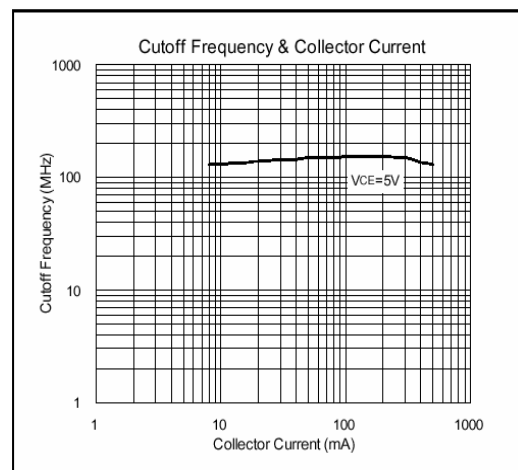
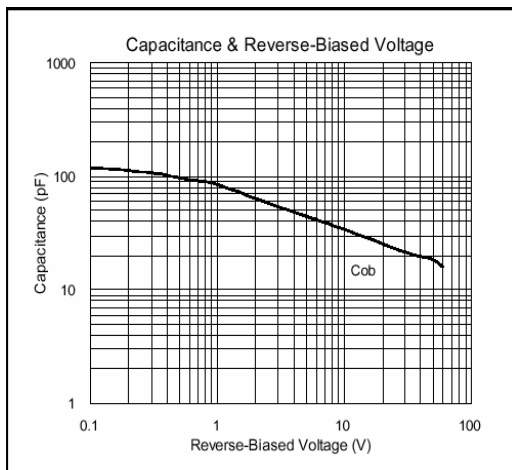
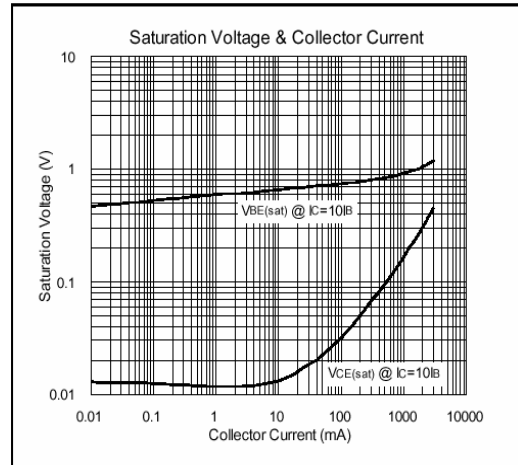
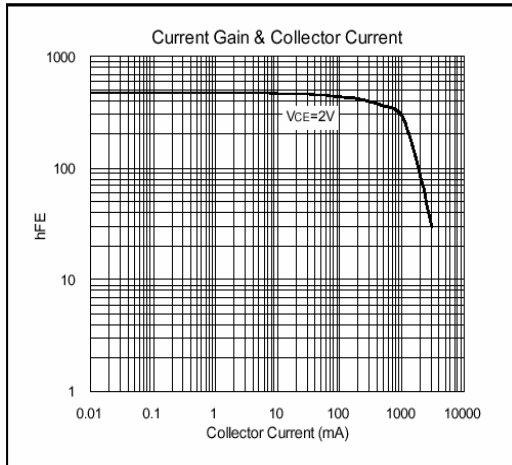
ELECTRICAL CHARACTERISTICS T_{amb}=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CBO}	-40	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CEO}	-30	-	-	V	I _C =-1 mA
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 _{BE} =-3V
Collector Saturation Voltage	V _{CE(sat)}	-	-0.3	-0.5	V	I _C =- 2 A, I _B =-0.2A
Base Saturation Voltage	V _{BE(sat)}	-	-1	-2	V	I _C =- 2A, I _B =- 0.2A
DC Current Gain	h _{FE1}	30	-	-		V _{CE} =-2V, I _C =-20mA
	h _{FE2}	100	160	500		V _{CE} =-2V, I _C =- 1 A
Gain-Bandwidth Product	f _T	-	80	-	MHz	V _{CE} =-5V, I _C =- 20mA, f=100MHz
Output Capacitance	C _{ob}	-	55	-	pF	V _{CB} =-10V, f=1MHz

Classification of hFE2

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

Characteristics Curve

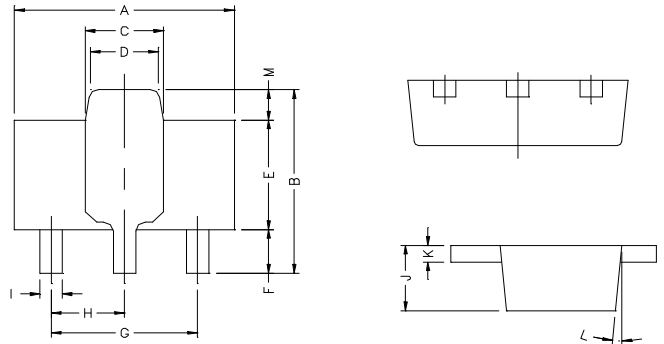


RoHS Compliant Product

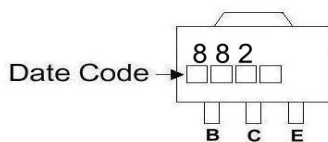
SOT-89

Description

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



Marking :



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 $T_A=25^\circ\text{C}$

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	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS $T_{amb}=25^\circ\text{C}$ unless otherwise specified

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

Classification of h_{FE}

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

Characteristics Curve

