BCP195

PNP Silicon Planar
Medium Power Transistor

RoHS Compliant Product

SOT-89

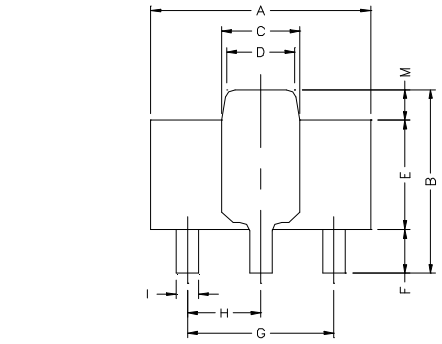
Description

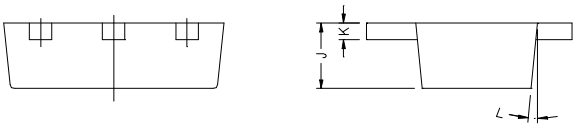
The BCP195 is designed for medium power amplifier applications.

1.BASE

2.COLLECTOR

3.EMITTER

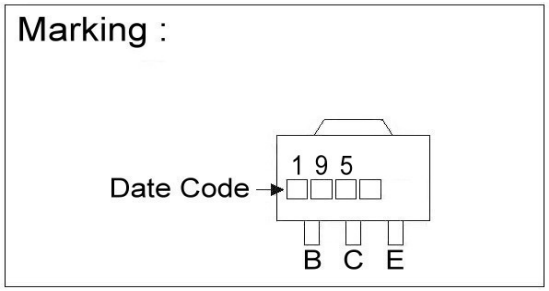




Features

* 1Amp Continuous Current
* -60V VCEO
* Complementary TO BCP194

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 Ta=25 °C

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-1	A
Collector Current (Pulse)	I_C	-2	A
Base Current	I_B	-200	mA
Total Power Dissipation	P_D	1	W
Operating Junction and Storage Temperature	T_J,T_{STG}	+150,-55~ +150	℃

Electrical Characteristics (Ta=25 °C, unless otherwise stated)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	-80	-	-	V	I_C=-100μA, I_E=0
Collector-Emitter Breakdown Voltage	BV_{CEO}	-60	-	-	V	I_C=-10mA, I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	I_E=-100μA, I_C=0
Collector Cut-off Current	I_{CBO}	-	-	-100	nA	V_{CB}=-60V, I_E=0
Emitter Cut-off Current	I_{EBO}	-	-	-100	nA	V_{EB}=-4V, I_C=0
Saturation Cut-off Current	I_{CES}	-	-	-100	nA	V_{CES}=-60V
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	-	-	-0.3	V	I_C=-500mA, I_B=-50mA
	$V_{CE(sat)2}$	-	-	-0.6	V	I_C=-1A, I_B =-100mA
Output Capacitance	C_{ob}	-	-	10	pF	V_{CB}=-10V, f=1MHz,I_E=0
Base-Emitter Voltage	$V_{BE(sat)}$	-	-	-1.2	V	I_C=-1A, I_B=-100mA
	$V_{BE(on)}$	-	-	-1	V	V_{CE}=-5V,I_B=-1A
DC Current Gain	h_{FE1}	100	-	-		V_{CE}=-5V, I_C=-1mA
	h_{FE2}	100	-	300		V_{CE}=-5V, I_C=-500mA
	h_{FE3}	80	-	-		V_{CE}=-5V, I_C=-1A
	h_{FE4}	15	-	-		V_{CE}=-5V, I_C=-2A
Transition Frequency	f_T	150	-	-	MHz	V_{CE}=-10V,I_C=-50mA, f=100MHz

Characteristics Curve