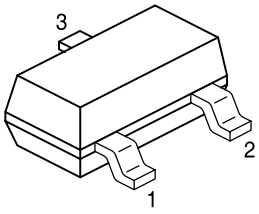
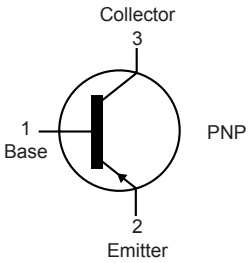
PNP General Purpose Amplifier





Features:

- For general AF applications
- High current gain
- Low collector-emitter saturation voltage
- Complementary types: BCW65,BCW66(NPN)

Applications:

- This device is designed for general purpose amplifier and switching applications

Pin Configuration:
1. Base
2. Emitter
3. Collector

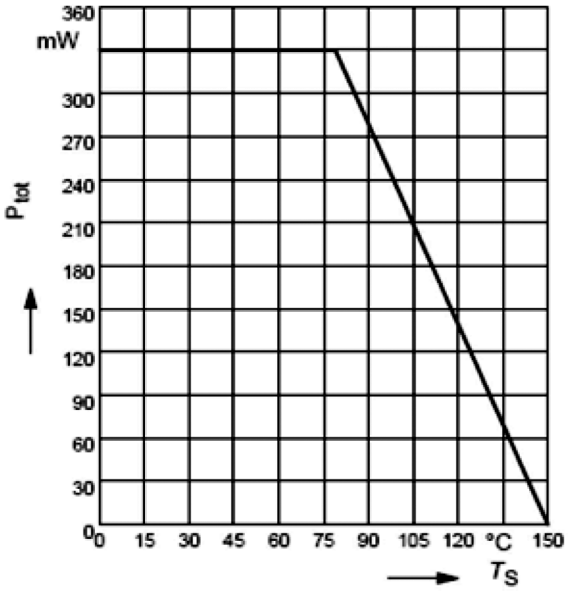
Maximum Ratings

Parameter	Symbol	Value	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-45	
Emitter - Base Voltage	V_{ebo}	-5	
DC Collector Current	I_C	-1	A
Collector Current Continuous	I_C	-800	mA
Total Device Dissipation	P_D	330	mW
Junction Thermal Resistance	R_{thJS}	215	°C/W
Junction and Storage Temperature	T_j, T_{stg}	-65 to +150	°C

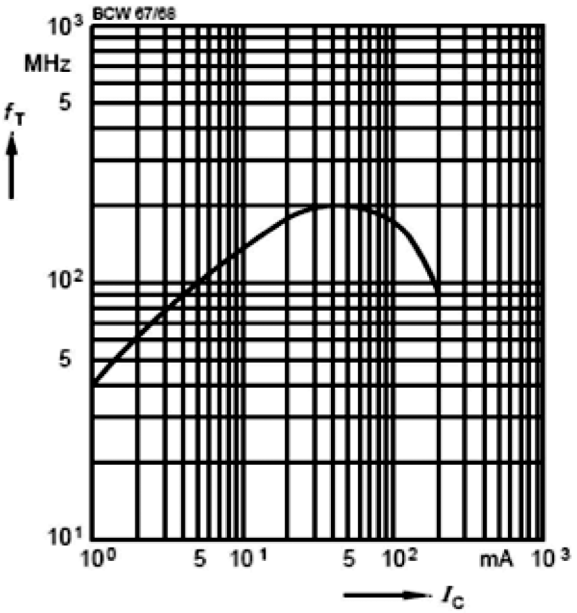
Electrical Characteristics (T_a = 25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=-10µA, I_E=0	-60			V
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-45			
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10µA, I_C=0	-5			
Collector Cut-Off Current	I_{CBO}	V_{CB}=-45V, I_E=0			-20	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-4V, I_C=0			-20	
DC Current Gain	h_{FE}	V_{CE}=-10V, I_C=-0.1mA	50 80			
		V_{CE}=-1V, I_C=-10mA	120 180			
		V_{CE}=-1V, I_C=-100mA	160 250	250 350	400 630	
		V_{CE}=-2V, I_C=-500mA	60 100			
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA I_C=-500mA, I_B=-50mA			-0.3 -0.7	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-100mA, I_B=-10mA I_C=-500mA, I_B=-50mA			-1.25 -2	
Transition Frequency	f_T	V_{CE}=-5V, I_C=-50mA f=20MHz		200		MHz

Total power dissipation $P_{tot} = f(T_S)$

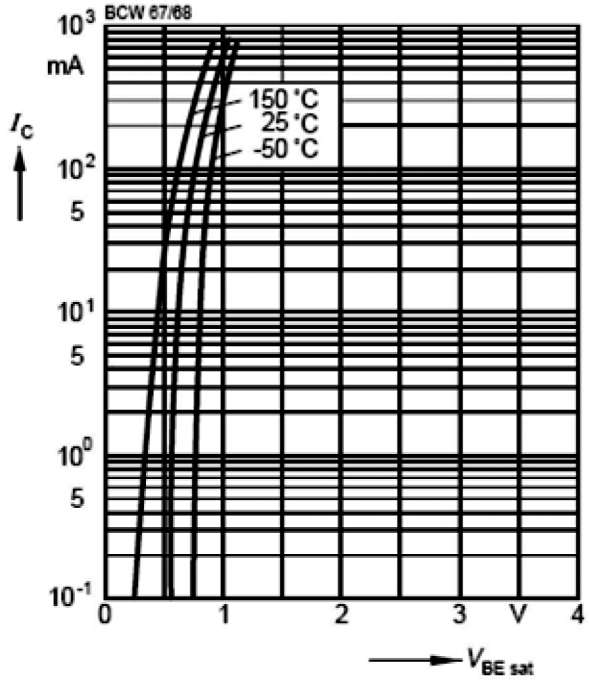


Transition frequency $f_T = f(I_C)$
V_{CE} = 5V



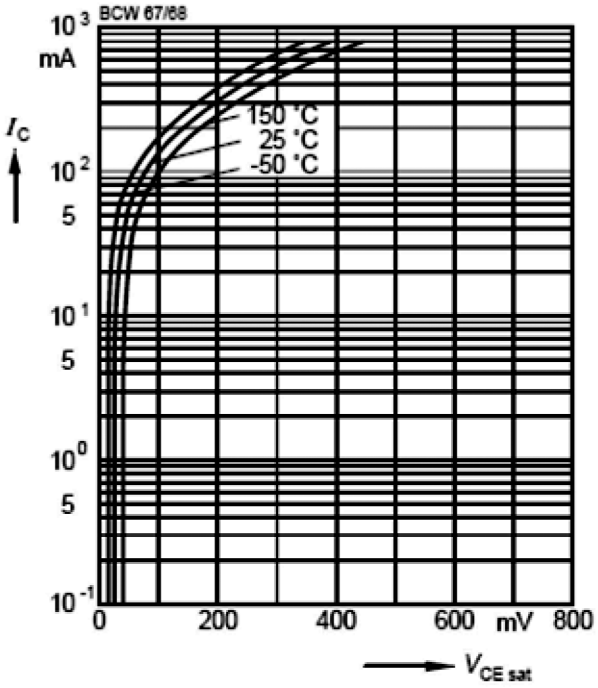
Base-emitter saturation voltage

$I_C = f(V_{BEsat})$, $h_{FE} = 10$



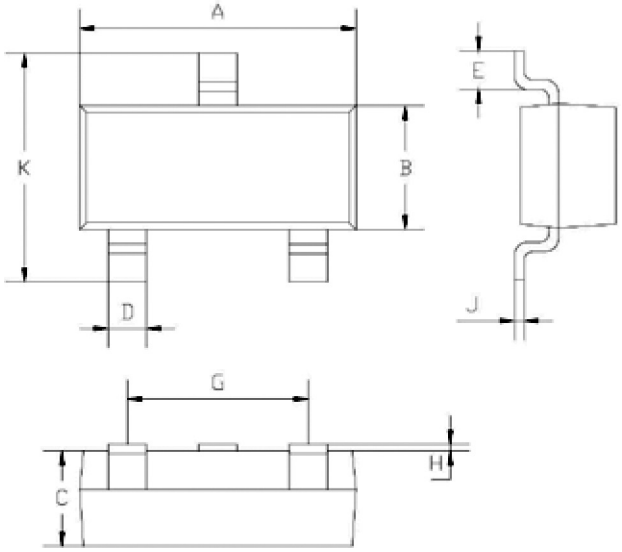
Collector-emitter saturation voltage

$I_C = f(V_{CEsat})$, $h_{FE} = 10$



Package Outline

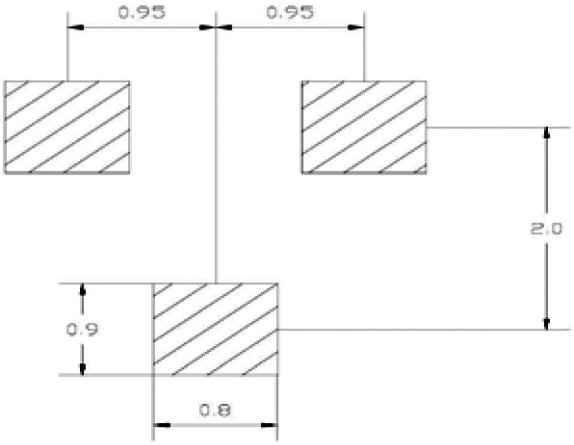
Plastic surface mounted package



Dimensions	Min.	Max.
A	2.85	2.95
B	1.25	1.35
C	1 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45

Dimensions : Millimetres

Soldering Footprint



Dimensions : Millimetres

Part Number Table

Description	Part Number
Transistor, PNP, 0.8A, 45V, SOT23	BCW68G
	BCW68H