

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

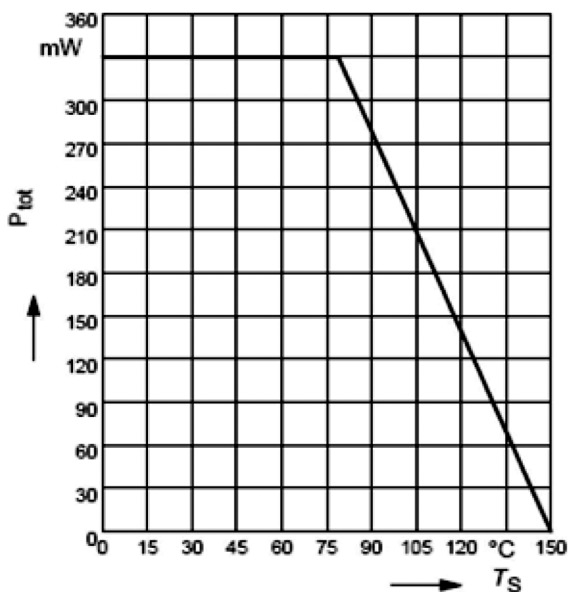
Maximum Ratings

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 ($T_a = 25^\circ\text{C}$ unless otherwise noted)

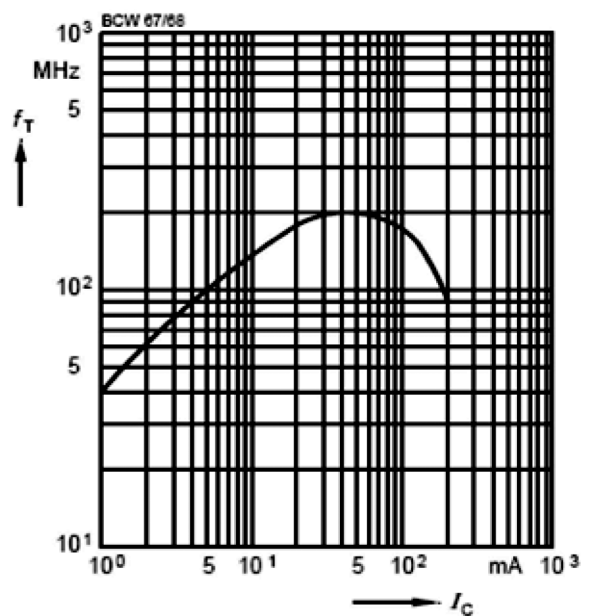
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-60			V
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-45			
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A},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

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



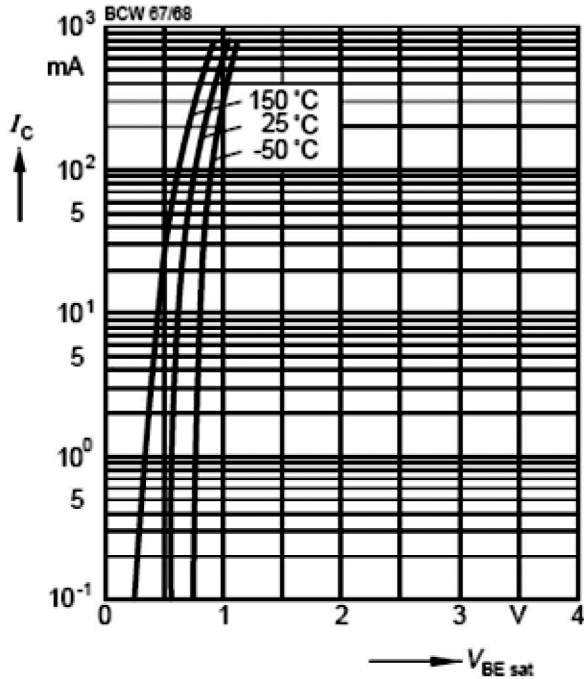
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5\text{V}$



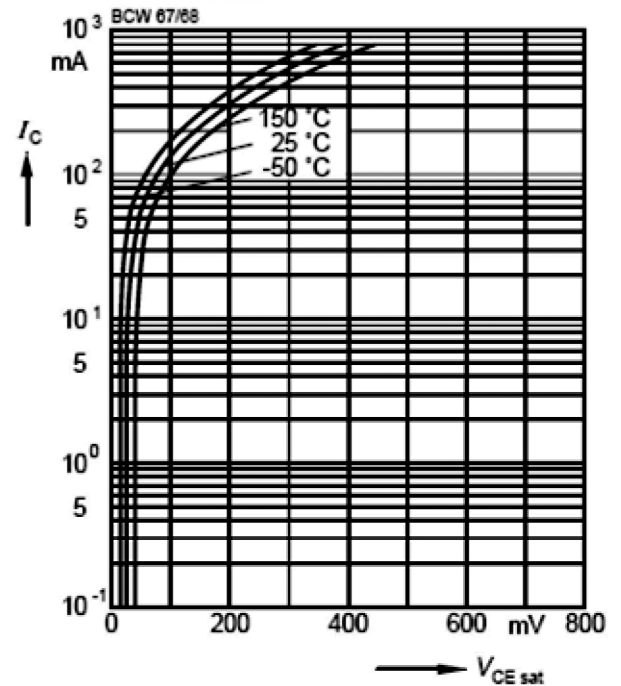
Base-emitter saturation voltage

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



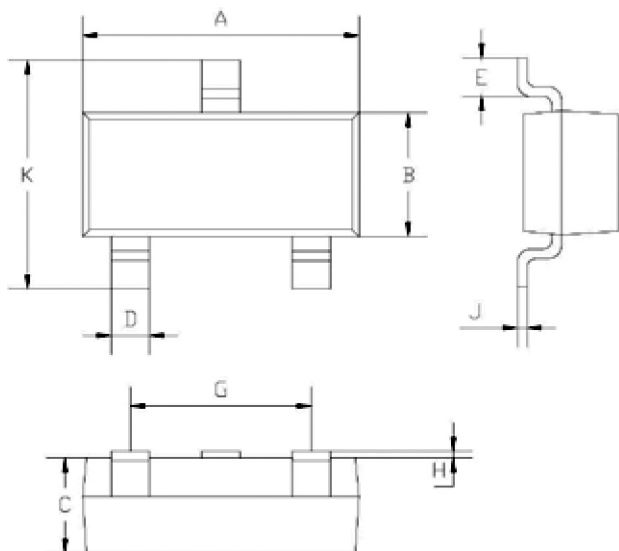
Collector-emitter saturation voltage

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



Package Outline

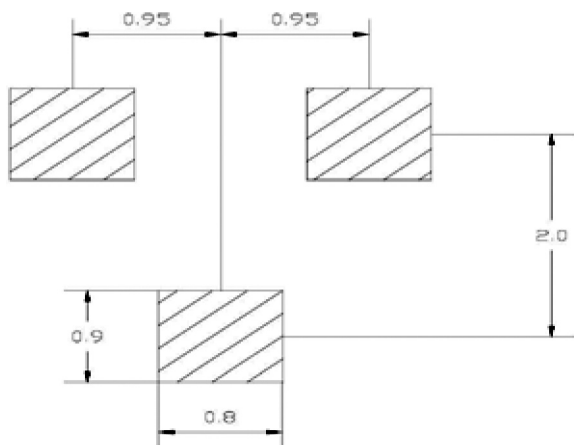
Plastic surface mounted package



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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
 Farnell.com/multicomp-pro
 Element14.com/multicomp-pro