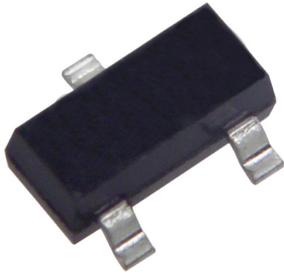
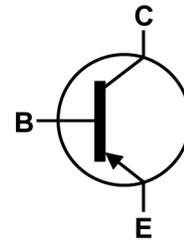


SOT23 PNP Transistor



Features:

- Silicon planar epitaxial transistors
- PNP Transistors



Device Symbol

Absolute Maximum Ratings:

Characteristics	Symbol	-	BC858C	Units
Collector-Emitter Voltage (+V _{BE} = 1V)	V _{CEX}	Max.	30	V
Collector-Emitter Voltage (Open Base)	V _{CEO}			
Collector Current (Peak Value)	I _{CM}		200	mA
Total Power Dissipation up to T _a = 25°C	P _{tot}		250	mW
Junction Temperature	T _j		150	°C
Small-Signal Current Gain -I _C = 2mA; -V _{CE} = 5V; f = 1kHz	h _{fe}	-	420 to 800	-
Transition Frequency at f = 100MHz -I _C = 10mA; -V _{CE} = 5V	f _T	>	100	MHz
Noise Figure at RS = 2kW -I _C = 200mA; -V _{CE} = 5V f = 1kHz; B = 200Hz	F	<	10	dB

Ratings (at T_A = 25°C unless otherwise specified)

Limiting Values	Symbol	-	BC858C	Units
Collector-Base Voltage (Open Emitter)	V _{CBO}	Max.	30	V
Collector-Emitter Voltage (+V _{BE} = 1V)	V _{CEX}			
Collector-Emitter Voltage (Open Base)	V _{CEO}			
Emitter-Base Voltage (Open Collector)	V _{EBO}		5	
Collector Current (DC)	I _C		100	mA
Collector Current (Peak Value)	I _{CM}		200	

Ratings (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Limiting Values	Symbol	-	BC858C	Units
Emitter Current (Peak Value)	I_{EM}	Max.	200	mA
Base Current (Peak Value)	I_{BM}			
Total Power Dissipation* up to T_a : 60°C	P_{tot}		250	mV
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$
Junction Temperature	T_j		150	

Thermal Characteristics

$T_j = P_x (R_{th\ j-t} + R_{th\ t-s} + R_{th\ s-a}) + T_a$	-	-	-	-
Thermal Resistance	-	-	-	-
From Junction to Tab	$R_{th\ (j-t)}$	=	60	K/W
From Tab to Soldering Points	$R_{th\ (t-s)}$		280	
From Soldering Points to Ambient	$R_{th\ (s-a)}$		90	

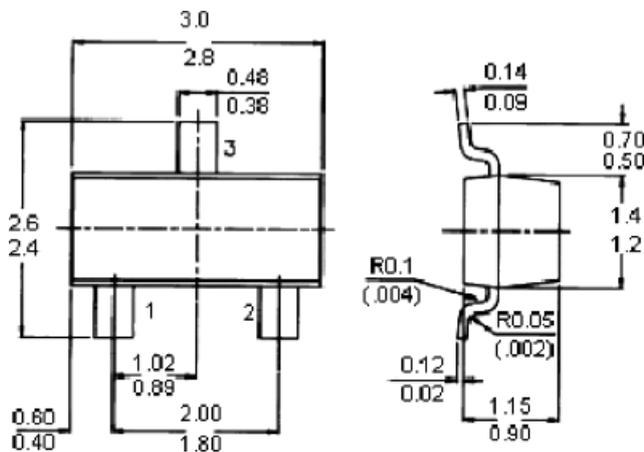
Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)

Limiting Values	Symbol	-	BC858C	Units
Collector Cut off Current $I_E = 0$; $-V_{CB} = 30\text{V}$ $T_j = 25^\circ\text{C}$ $T_j = 150^\circ\text{C}$	I_{CBO}	Typ. < <	1 15 4	nA nA mA
Base-Emitter Voltage $-I_C = 2\text{mA}$; $-V_{CE} = 5\text{V}$ $-I_C = 10\text{mA}$; $-V_{CE} = 5\text{V}$	V_{BE} V_{BE}	Typ. <	650 600 to 750 820	mV
Saturation Voltage $-I_C = 10\text{mA}$; $-I_B = 0.5\text{mA}$ $-I_C = 100\text{mA}$; $-I_B = 5\text{mA}$	$V_{CE\ (sat)}$ $V_{BE\ (sat)}$ $V_{CE\ (sat)}$ $V_{BE\ (sat)}$	Typ. < Typ. Typ. < Typ.	75 300 700 250 650 850	
Knee Voltage $-I_C = 10\text{mA}$; $-I_B = \text{Value For Which}$ $-I_C = 11\text{mA}$ at $-V_{CE} = 1\text{V}$	V_{CEK}	Typ. <	250 600	
Collector Capacitance at $f = 1\text{MHz}$ $I_E = I_e = 0$; $-V_{CB} = 10\text{V}$	C_C	Typ.	4.5	
Transition Frequency at $f = 100\text{MHz}$ $-I_C = 10\text{mA}$; $-V_{CE} = 5\text{V}$	f_T	>	100	MHz

SOT23 PNP Transistor

Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)

Limiting Values	Symbol	-	BC858C	Units
Small Signal Current Gain at $f = 1\text{kHz}$ $-I_C = 2\text{mA}; -V_{CE} = 5\text{V}$	h_{fe}	Min.	420 to 800	-
Noise Figure at $R_S = 2\text{KW}$ $-I_C = 200\text{mA}; -V_{CE} = 5\text{V};$ $f = 1\text{kHz}; B = 200\text{Hz}$	F	Typ. <	2 10	dB
DC Current Gain $-I_C = 2\text{mA}; -V_{CE} = 5\text{V}$	h_{FE}	-	420 to 800	-



Pin Configuration:

1. Base
2. Emitter
3. Collector

Dimensions : Millimetres

Part Number Table

Description	Part Number
Transistor, PNP, SOT-23	BC858C

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.