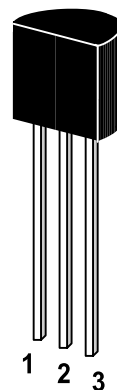
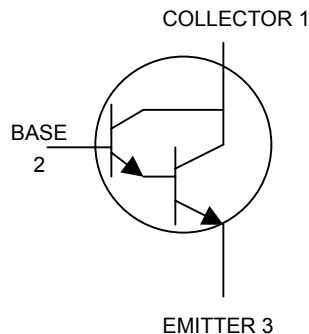


BC517

NPN Silicon Darlington Transistor



1. Collector 2. Base 3. Emitter

TO-92 Plastic Package
Weight approx. 0.19g

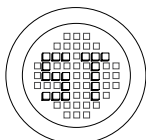
Absolute Maximum Ratings ($T_a=25\text{ }^{\circ}\text{C}$)

	Symbol	Value	Unit
Collector Emitter Voltage	V_{CES}	30	V
Collector Base Voltage	V_{CB}	40	V
Emitter Base Voltage	V_{EB}	10	V
Collector Current	I_C	1	A
Total Power Dissipation @ $T_A=25^{\circ}\text{C}$	P_D	625	mW
Derate above 25°C		12	mW/ $^{\circ}\text{C}$
Total Power Dissipation @ $T_C=25^{\circ}\text{C}$	P_D	1.5	W
Derate above 25°C		12	mW/ $^{\circ}\text{C}$
Operating and Storage Temperature Range	T_J, T_S	-55 to +150	$^{\circ}\text{C}$

Thermal Characteristics

	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	200	$^{\circ}\text{C}/\text{W}$
Thermal Resistance, Junction to Case	$R_{\theta JC}$	83.3	$^{\circ}\text{C}/\text{W}$

G S P FORM A IS AVAILABLE



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РАДИОТЕХ-ТРЕЙД

Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

BC517

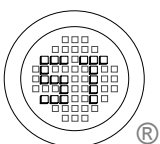
Characteristics (T_A=25 °C unless otherwise noted)

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V _{CE} =2V, I _C =20mA	h _{FE}	30,000	-	-	-
Collector Saturation Voltage at I _C =100mA, I _B =0.1mA	V _{CEsat}	-	-	1	V
Base Emitter On Voltage at V _{CE} =5V, I _C =10mA	V _{BE(on)}	-	-	1.4	V
Collector Emitter Breakdown Voltage at I _C =2mA, V _{BE} =0	V _{(BR)CES}	30	-	-	V
Collector Base Breakdown Voltage at I _C =10μA, I _E =0	V _{(BR)CBO}	40	-	-	V
Emitter Base Breakdown Voltage at I _E =100nA, I _C =0	V _{(BR)EBO}	10	-	-	V
Collector Cutoff Current at V _{CE} =30V	I _{CES}	-	-	500	nA
Collector Cutoff Current at V _{CB} =30V, I _E =0	I _{CBO}	-	-	100	nA
Emitter Cutoff Current at V _{EB} =10V, I _C =0	I _{EBO}	-	-	100	nA
Current-Gain-Bandwidth Product ⁽²⁾ at V _{CE} =5V, I _C =10mA, f=100MHz	f _T	-	200	-	MHz

1. Pulse Test: Pulse Width ≤2%

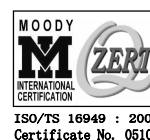
2. f_T=|h_{fe}|·f_{test}

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SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, acompany
listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated :07/12/2002