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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









BC182L

- NPN General Purpose Amplifier

 This device is designed for general purpose amplifier application at collector currents to 100mA.
- Sourced from process 10.



1. Emitter 2. Collector 3. Base

Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	50	V
V _{CBO}	Collector-Base Voltage	60	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current - Continuous	100	mA
T _{J,} T _{STG}	Storage Junction Temperature Range	- 55 ~ 150	°C

Electrical Characteristics $T_C=25^{\circ}C$ unless otherwise noted

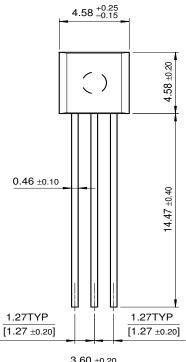
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
Off Chara	Off Characteristics					
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	$I_C = 2mA, I_B = 0$	50			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	$I_C = 10\mu A, I_E = 0$	60			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	$I_E = 100\mu A, I_C = 0$	6			V
I _{CBO}	Collector Cut-off Current	$V_{CB} = 50V, V_{BE} = 0$			15	nA
I _{EBO}	Emitter-Base Leakage Current	$V_{EB} = 4V, I_{E} = 0$			15	nA
On Characteristics						
h _{FE}	DC Current Gain	$V_{CE} = 5V, I_{C} = 10\mu A$ $V_{CE} = 5V, I_{C} = 2mA$ $V_{CE} = 5V, I_{C} = 100mA$	40 120 80		500	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	$I_C = 10 \text{mA}, I_B = 0.5 \text{mA}$ $I_C = 100 \text{mA}, I_B = 5 \text{mA}$			0.25 0.6	V
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = 100mA, I _B = 5mA			1.2	V
V _{BE} (on)	Base-Emitter On Voltage	$V_{CE} = 5V$, $I_C = 2mA$	0.55		0.7	V
Dynamic Characteristics						
f _T	Current Gain Bandwidth Product	$V_{CE} = 5V, I_{C} = 10mA, f = 100MHz$	150			MHz
C _{ob}	Output Capacitance	$V_{CE} = 10V, I_{C} = 0, f = 1MHz$			5	pF
h _{fe}	Small Signal Current Gain	$V_{CE} = 5V$, $I_C = 2mA$, $f = 1KHz$	240		500	
NF	Noise Figure	$V_{CE} = 5V$, $I_{C} = 0.2mA$ $R_{S} = 2K\Omega$, $f = 1KHz$, $BW = 200Hz$			10	dB

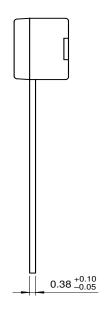
Thermal Characteristics $T_A=25$ °C unless otherwise noted

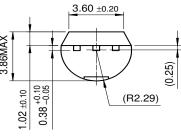
Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation @T _A =25°C	350	mW
_	Derate above 25°C	2.8	mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
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Package Dimensions

TO-92







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Rev. I1

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Definition of Terms

Datasheet Identification	Product Status	Definition
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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