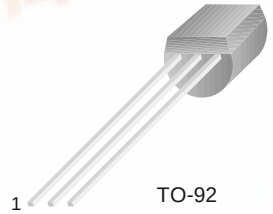
FAIRCHILD SEMICONDUCTOR®

BC184L

Silicon NPN Small Signal Transistor (Note 1)

- BV_{CEO} = 30V (Min.)
- h_{FE} = 130 (Min.) @V_{CE} = 5.0V, I_C = 100mA



TO-92

1. Emitter 2. Collector 3. Base

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	45	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current (DC)	500	mA
P_C	Collector Dissipation (T_a=25°C) (Note 2, 3)	350	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

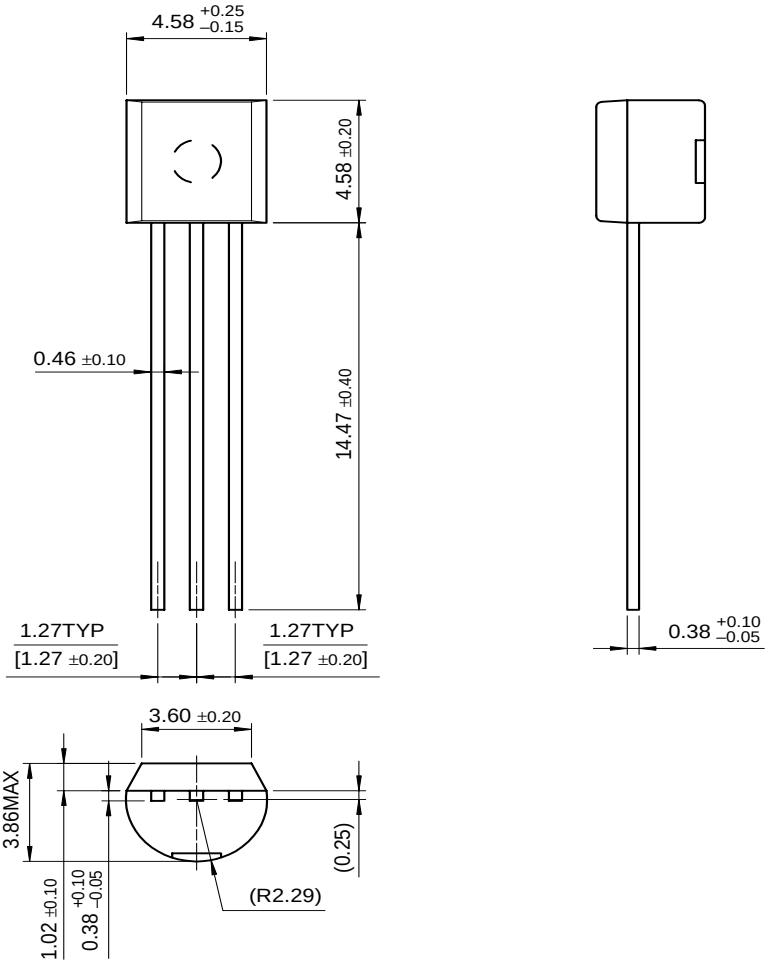
Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Voltage	I_C = 10μA	45			V
BV_{CEO}	Collector-Emitter Voltage	I_C = 2mA	30			V
BV_{EBO}	Emitter-Base Voltage	I_E = 10μA	5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 30V			15	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 3V			15	nA
h_{FE}	DC Current Gain	V_{CE} = 5V, I_C = 10μA V_{CE} = 5V, I_C = 100mA	100 130			
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 10mA, I_B = 0.5mA I_C = 100mA, I_B = 5mA			0.6 0.25	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
C_{OB}	Output Capacitance	V_{CE} = 10V, f = 1MHz			5	pF
f_T	Current gain Bandwidth Product	V_{CE} = 5V, I_C = 10mA f = 100MHz	150			MHz
h_{FE}	Small Signal Current Gain	V_{CE} = 5V, I_C = 2mA f = 1KHz	450		900	
NF	Noise Figure	V_{CE} = 5V, I_C = 200mA R_G = 2KΩ, f = 1KHz			4	dB

Notes:
1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
3. These ratings are based on a maximum junction temperature of 150degrees C.

Package Dimensions

TO-92



Dimensions in Millimeters

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