Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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!

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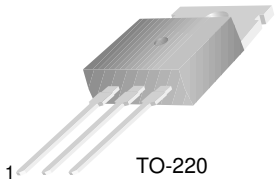
FAIRCHILD SEMICONDUCTOR™

BD242/A/B/C

Medium Power Linear and Switching Applications

- Complement to BD241/A/B/C respectively



TO-220

1.Base 2.Collector 3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage		
	: BD242	- 45	V
	: BD242A	- 60	V
	: BD242B	- 80	V
	: BD242C	- 100	V
V_{CER}	Collector-Emitter Voltage		
	: BD242	- 55	V
	: BD242A	- 70	V
	: BD242B	- 90	V
	: BD242C	- 115	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current (DC)	- 3	A
I_{CP}	*Collector Current (Pulse)	- 5	A
I_B	Base Current	- 1	A
P_C	Collector Dissipation (T_C=25°C)	40	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 65 ~ 150	°C

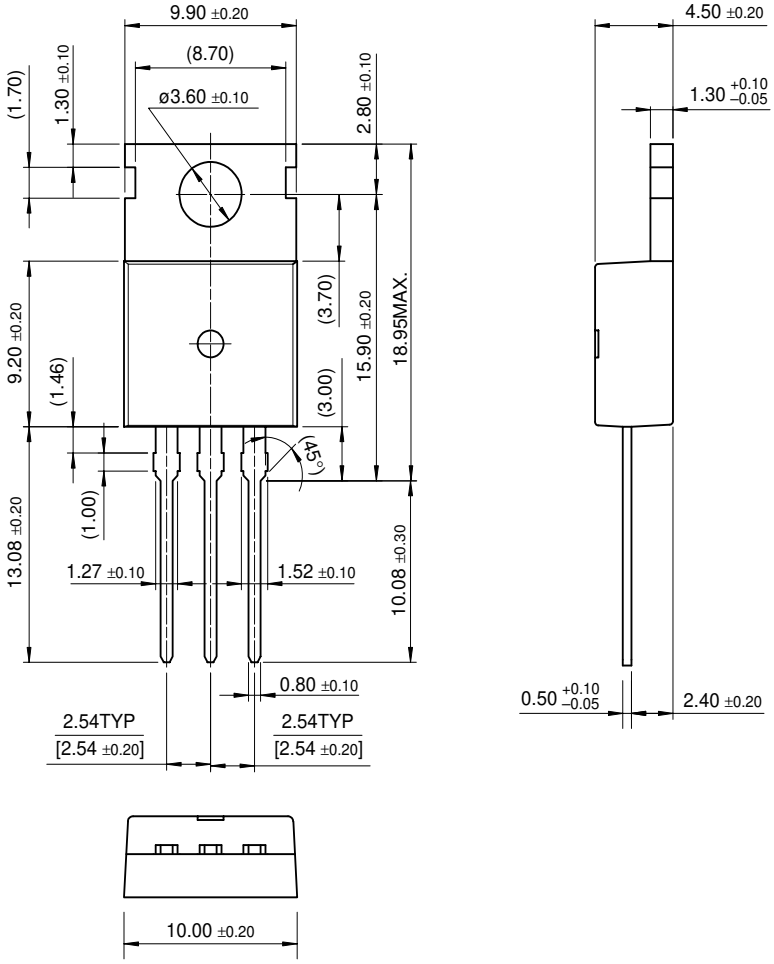
Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V_{CEO}(sus)	* Collector-Emitter Sustaining Voltage					
	: BD242	I_C = - 30mA, I_B = 0	- 45			V
	: BD242A		- 60			V
	: BD242B		- 80			V
	: BD242C		- 100			V
I_{CEO}	Collector Cut-off Current : BD242/A	V_{CE} = - 30V, I_B = 0			- 0.3	mA
	: BD242B/C	V_{CE} = - 60V, I_B = 0			- 0.3	mA
I_{CES}	Collector Cut-off Current : BD242	V_{CE} = - 45V, V_{BE} = 0			- 0.2	mA
	: BD242A	V_{CE} = - 60V, V_{BE} = 0			- 0.2	mA
	: BD242B	V_{CE} = - 80V, V_{BE} = 0			- 0.2	mA
	: BD242C	V_{CE} = - 100V, V_{BE} = 0			- 0.2	mA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 5V, I_C = 0			- 1	mA
h_{FE}	* DC Current Gain	V_{CE} = - 4V, I_C = - 1A	25			
		V_{CE} = - 4V, I_C = - 3A	10			
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = - 3A, I_B = - 0.6A			- 1.2	V
V_{BE}(on)	* Base-Emitter ON Voltage	V_{CE} = - 4V, I_C = - 3A			- 1.8	V

* Pulse Test: PW=300μs, duty Cycle≤2% Pulsed

Package Demensions

TO-220



Dimensions in Millimeters

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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