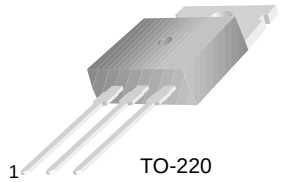
FAIRCHILD SEMICONDUCTOR™

BD241/A/B/C

Medium Power Linear and Switching Applications

- Complement to BD242/A/B/C respectively



TO-220

1.Base 2.Collector 3.Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage		
	: BD241	45	V
	: BD241A	60	V
	: BD241B	80	V
	: BD241C	100	V
V_{CER}	Collector-Emitter Voltage		
	: BD241	55	V
	: BD241A	70	V
	: BD241B	90	V
	: BD241C	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

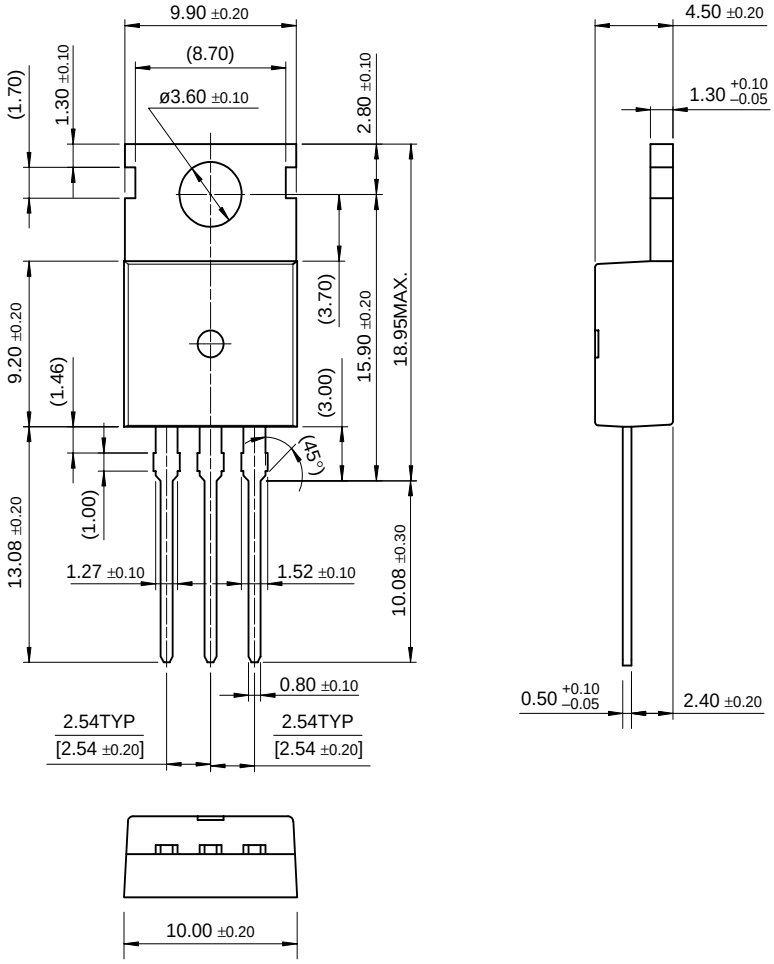
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V_{CEO}(sus)	* Collector-Emitter Sustaining Voltage					
	: BD241	I_C = - 30mA, I_B = 0	45			V
	: BD241A		60			V
	: BD241B		80			V
	: BD241C		100			V
I_{CEO}	Collector Cut-off Current : BD241/A	V_{CE} = 30V, I_B = 0			0.3	mA
	: BD241B/C	V_{CE} = 60V, I_B = 0			0.3	mA
I_{CES}	Collector Cut-off Current : BD241	V_{CE} = 45V, V_{BE} = 0			0.2	mA
	: BD241A	V_{CE} = 60V, V_{BE} = 0			0.2	mA
	: BD241B	V_{CE} = 80V, V_{BE} = 0			0.2	mA
	: BD241C	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=350μs, duty Cycle≤2% Pulsed

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Package Demensions

TO-220



Dimensions in Millimeters

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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