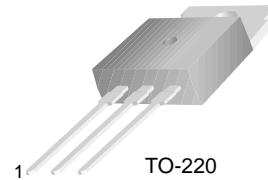




BD241/A/B/C

Medium Power Linear and Switching Applications

- Complement to BD242/A/B/C respectively



1. Base 2. Collector 3. Emitter

NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage : BD241 : BD241A : BD241B : BD241C	45 60 80 100	V
V_{CER}	Collector-Emitter Voltage : BD241 : BD241A : BD241B : BD241C	55 70 90 115	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 ($T_C=25^\circ\text{C}$)	40	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 65 ~ 150	$^\circ\text{C}$

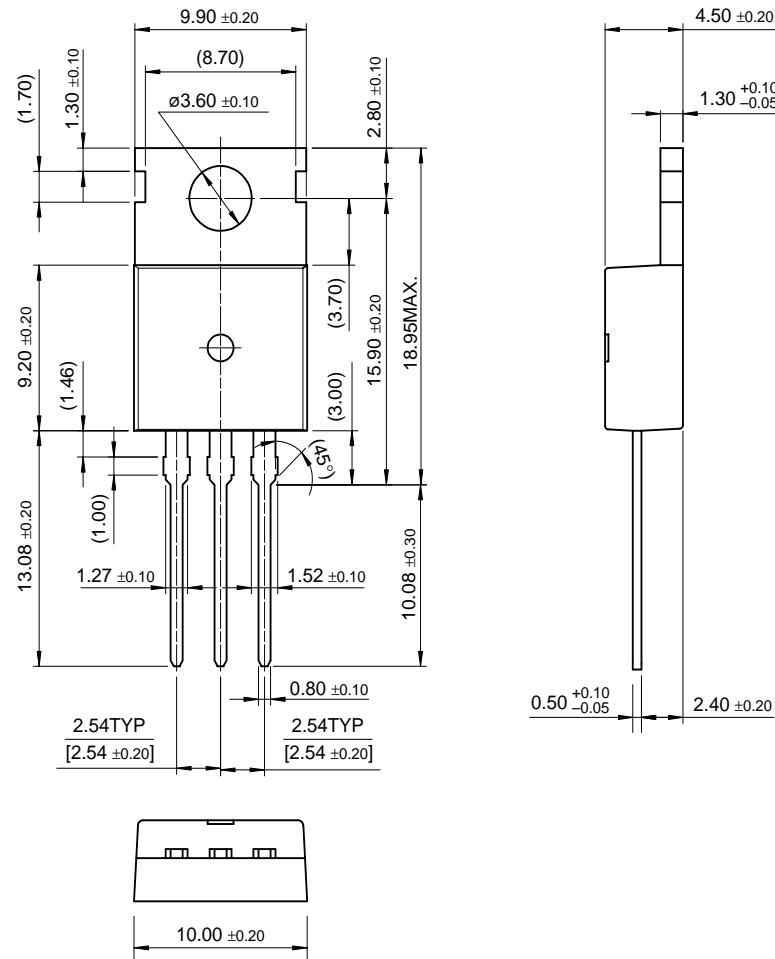
Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$V_{CEO(\text{sus})}$	* Collector-Emitter Sustaining Voltage : BD241 : BD241A : BD241B : BD241C	$I_C = -30\text{mA}$, $I_B = 0$	45 60 80 100			V
I_{CEO}	Collector Cut-off Current : BD241/A : BD241B/C	$V_{CE} = 30\text{V}$, $I_B = 0$ $V_{CE} = 60\text{V}$, $I_B = 0$			0.3 0.3	mA
I_{CES}	Collector Cut-off Current : BD241 : BD241A : BD241B : BD241C	$V_{CE} = 45\text{V}$, $V_{BE} = 0$ $V_{CE} = 60\text{V}$, $V_{BE} = 0$ $V_{CE} = 80\text{V}$, $V_{BE} = 0$ $V_{CE} = 100\text{V}$, $V_{BE} = 0$			0.2 0.2 0.2 0.2	mA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = 5\text{V}$, $I_C = 0$			1	mA
h_{FE}	* DC Current Gain	$V_{CE} = 4\text{V}$, $I_C = 1\text{A}$ $V_{CE} = 4\text{V}$, $I_C = 3\text{A}$	25 10			
$V_{CE(\text{sat})}$	* Collector-Emitter Saturation Voltage	$I_C = 3\text{A}$, $I_B = 0.6\text{A}$			1.2	V
$V_{BE(\text{on})}$	* Base-Emitter ON Voltage	$V_{CE} = 4\text{V}$, $I_C = 3\text{A}$			1.8	V

* Pulse Test: PW=350 μs , duty Cycle $\leq 2\%$ Pulsed

Package Demensions

TO-220



Dimensions in Millimeters

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