



## BD240/A/B/C

### Medium Power Linear and Switching Applications

- Complement to BD239/A/B/C respectively



1. Base 2. Collector 3. Emitter

### PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
$V_{CEO}$	Collector-Base Voltage : BD240 : BD240A : BD240B : BD240C	- 45 - 60 - 80 - 100	V
$V_{CER}$	Collector-Emitter Voltage : BD240 : BD240A : BD240B : BD240C	- 55 - 70 - 90 - 115	V
$V_{EBO}$	Emitter-Base Voltage	- 5	V
$I_C$	Collector Current (DC)	- 2	A
$I_{CP}$	*Collector Current (Pulse)	- 4	A
$I_B$	Base Current	- 0.6	A
$P_C$	Collector Dissipation ( $T_C=25^\circ\text{C}$ )	30	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	- 65 ~ 150	$^\circ\text{C}$

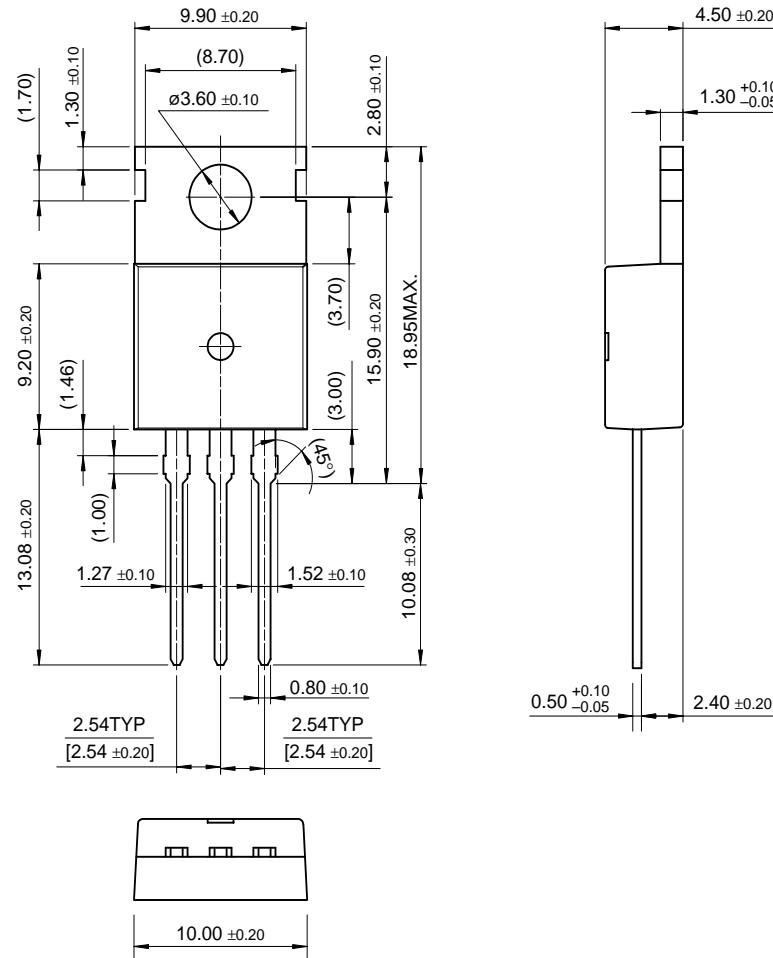
#### Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$V_{CEO(sus)}$	* Collector-Emitter Sustaining Voltage : BD240 : BD240A : BD240B : BD240C	$I_C = - 30\text{mA}$ , $I_B = 0$	- 45 - 60 - 80 - 100			V
$I_{CEO}$	Collector Cut-off Current : BD240/A : BD240B/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 : BD240 : BD240A : BD240B : BD240C	$V_{CE} = - 45\text{V}$ , $V_{BE} = 0$ $V_{CE} = - 60\text{V}$ , $V_{BE} = 0$ $V_{CE} = - 80\text{V}$ , $V_{BE} = 0$ $V_{CE} = - 100\text{V}$ , $V_{BE} = 0$			- 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	$V_{CE} = - 4\text{V}$ , $I_C = - 0.2\text{A}$ $V_{CE} = - 4\text{V}$ , $I_C = - 1\text{A}$	40 15			
$V_{CE(sat)}$	* Collector-Emitter Saturation Voltage	$I_C = - 1\text{A}$ , $I_B = - 0.2\text{A}$			- 0.7	V
$V_{BE(on)}$	* Base-Emitter ON Voltage	$V_{CE} = - 4\text{V}$ , $I_C = - 1\text{A}$			- 1.3	V

\* Pulse Test: PW=350 $\mu\text{s}$ , duty Cycle $\leq 2.0\%$  Pulsed

## Package Demensions

TO-220



Dimensions in Millimeters

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