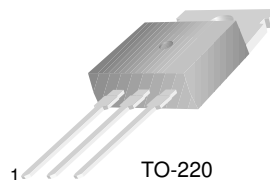


BD241/A/B/C

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 $T_C=25^\circ\text{C}$ 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 ($T_C=25^\circ\text{C}$)	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

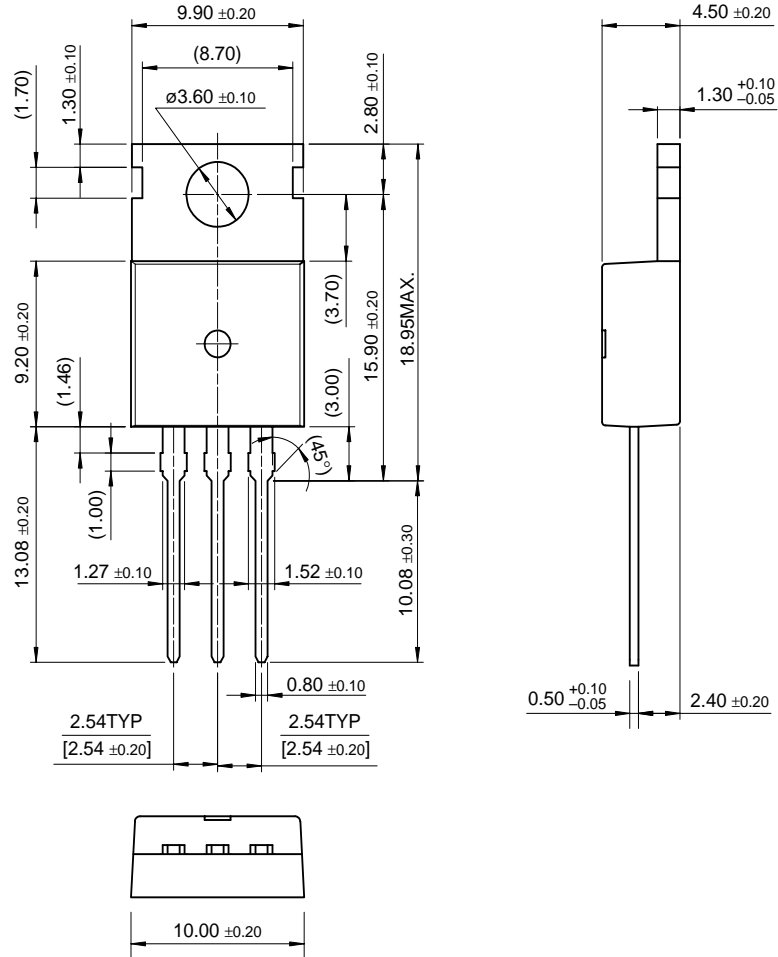
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$V_{CEO(sus)}$	* Collector-Emitter Sustaining Voltage					
	: BD241	$I_C = -30\text{mA}, I_B = 0$	45			V
	: BD241A		60			V
	: BD241B		80			V
: BD241C	100				V	
I_{CEO}	Collector Cut-off Current	$V_{CE} = 30\text{V}, I_B = 0$			0.3	mA
	: BD241B/C	$V_{CE}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

* Pulse Test: $PW=350\mu\text{s}$, duty Cycle $\leq 2\%$ Pulsed

Package Dimensions

BD241/A/B/C

TO-220



Dimensions in Millimeters

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[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and](#)

[applications](#)

[New products](#)

[Product selection and](#)

[parametric search](#)

[Cross-reference](#)

[search](#)

BD241B

NPN Epitaxial Silicon Transistor

[Contents](#)

[Features](#) | [Applications](#) | [Product status/pricing/packaging](#)

Features

- Complement to BD242/A/B/C respectively

[back to top](#)

Applications

Medium Power Linear and Switching

[back to top](#)

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
BD241BTU	Full Production	\$0.314	TO-220	3	RAIL

* 1,000 piece Budgetary Pricing

[back to top](#)

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This page [Print version](#)

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[Product Folders and](#) [Applies](#)

[find products](#)

[Home >> Find products >>](#)

[Products groups](#)

[Analog and Mixed](#)

[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and](#)

[applications](#)

[New products](#)

[Product selection and](#)

[parametric search](#)

[Cross-reference](#)

[search](#)

BD241A

NPN Epitaxial Silicon Transistor

[Contents](#)

[Features](#) | [Applications](#) | [Product status/pricing/packaging](#)

Features

- Complement to BD242/A/B/C respectively

[back to top](#)

Applications

Medium Power Linear and Switching

[back to top](#)

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
BD241ATU	Full Production	\$0.314	TO-220	3	RAIL

* 1,000 piece Budgetary Pricing

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) | [Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

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This page

[Print version](#)

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SEARCH | [Parametric](#) | [Cross Reference](#)

[Product Folders and](#) [Applies](#)

[find products](#)

[Home](#) >> [Find products](#) >>

[Products groups](#)

[Analog and Mixed](#)

[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and](#)

[applications](#)

[New products](#)

[Product selection and](#)

[parametric search](#)

[Cross-reference](#)

[search](#)

BD241

NPN Epitaxial Silicon Transistor

[Contents](#)

[Features](#) | [Applications](#) | [Product status/pricing/packaging](#)

Features

- Complement to BD242/A/B/C respectively

[back to top](#)

Applications

Medium Power Linear and Switching

[back to top](#)

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
BD241TU	Full Production	\$0.314	TO-220	3	RAIL

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[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) | [Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

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This page

[Print version](#)

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[Product Folders and](#) [Applies](#)

[find products](#)

[Home >>](#) [Find products >>](#)

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[Analog and Mixed](#)

[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and](#)

[applications](#)

[New products](#)

[Product selection and](#)

[parametric search](#)

[Cross-reference](#)

[search](#)

BD241C

NPN Epitaxial Silicon Transistor

[Contents](#)

[Features](#) | [Applications](#) | [Product status/pricing/packaging](#)

Features

- Complement to BD242/A/B/C respectively

[back to top](#)

Applications

Medium Power Linear and Switching

[back to top](#)

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
BD241CTU	Full Production	\$0.314	TO-220	3	RAIL

* 1,000 piece Budgetary Pricing

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) | [Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

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