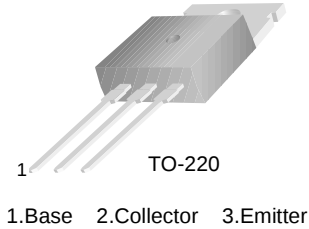


BD241/A/B/C

Medium Power Linear and Switching Applications

- Complement to BD242/A/B/C respectively



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 : BD241/A	$V_{CE} = 30\text{V}, I_B = 0$			0.3	mA
	: BD241B/C	$V_{CE} = 60\text{V}, I_B = 0$			0.3	mA
I_{CES}	Collector Cut-off Current : BD241	$V_{CE} = 45\text{V}, V_{BE} = 0$			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=350μs, duty Cycle≤2% Pulsed

BD241/A/B/C

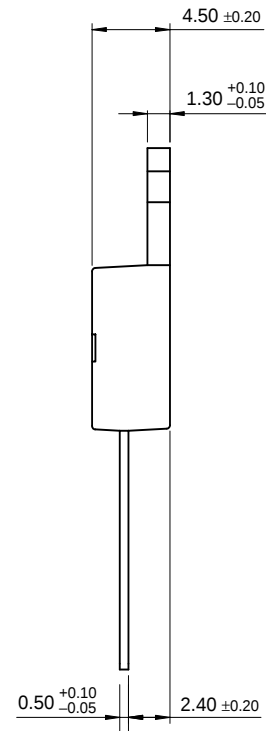
Technical drawing of a 3-pin connector showing front and top views with dimensions in millimeters.

Front View Dimensions:

- Overall width: 9.90 ± 0.20
- Internal width: (8.70)
- Top pin diameter: $\varnothing 3.60 \pm 0.10$
- Top pin offset: 1.30 ± 0.10
- Top pin height: (1.70)
- Top pin to top edge distance: 2.80 ± 0.10
- Top pin to bottom edge distance: 15.90 ± 0.20
- Top pin to bottom edge distance (MAX.): 18.95 MAX.
- Top pin to bottom edge distance (TYP.): (3.70)
- Top pin to bottom edge distance (TYP.): (3.00)
- Top pin to bottom edge distance (TYP.): (1.46)
- Top pin to bottom edge distance (TYP.): (1.00)
- Top pin to bottom edge distance (TYP.): 1.27 ± 0.10
- Top pin to bottom edge distance (TYP.): 1.52 ± 0.10
- Top pin to bottom edge distance (TYP.): 0.80 ± 0.10
- Top pin to bottom edge distance (TYP.): 2.54 TYP.
- Top pin to bottom edge distance (TYP.): $[2.54 \pm 0.20]$
- Top pin to bottom edge distance (TYP.): 13.08 ± 0.20
- Top pin to bottom edge distance (TYP.): 10.08 ± 0.30

Top View Dimensions:

- Overall width: 10.00 ± 0.20



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Rev. A, February 2000

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