## FAIRCHILD

SEMICONDUCTOR TM

## 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<sub>C</sub>=25°C unless otherwise noted

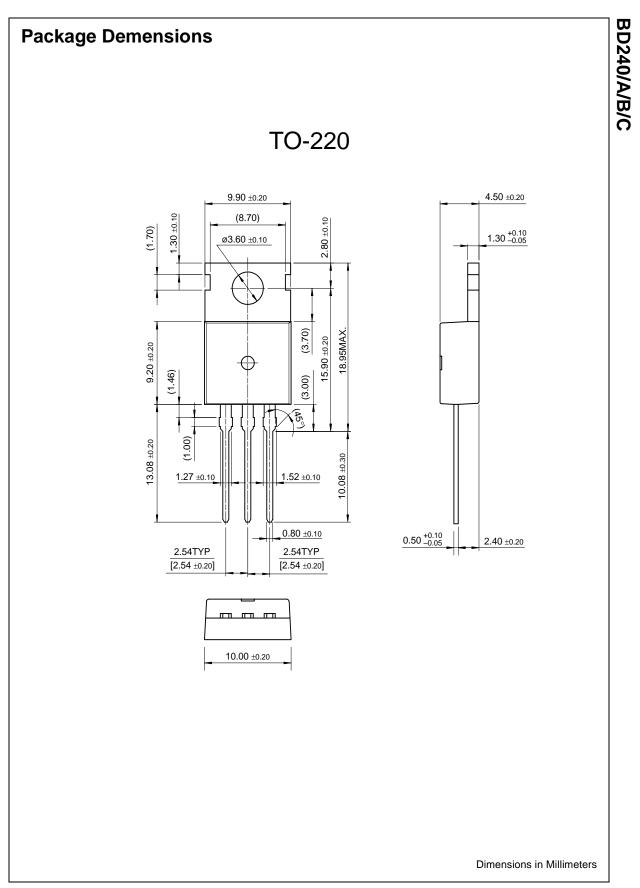
Symbol	Parameter	Value	Units
V <sub>CEO</sub>	Collector-Base Voltage		
	: BD240	- 45	V
	: BD240A	- 60	V
	: BD240B	- 80	V
	: BD240C	- 100	V
V <sub>CER</sub>	Collector-Emitter Voltage		
	: BD240	- 55	V
	: BD240A	- 70	V
	: BD240B	- 90	V
	: BD240C	- 115	V
V <sub>EBO</sub>	Emitter-Base Voltage	- 5	V
С	Collector Current (DC)	- 2	А
СР	*Collector Current (Pulse)	- 4	А
в	Base Current	- 0.6	А
P <sub>C</sub>	Collector Dissipation (T <sub>C</sub> =25°C)	30	W
Т <sub>Ј</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 65 ~ 150	°C

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

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
V <sub>CEO</sub> (sus)	* Collector-Emitter Sustaining Voltage		ĺ			
	: BD240	$I_{\rm C} = -30 {\rm mA}, I_{\rm B} = 0$	- 45	l		V
	: BD240A		- 60			V
	: BD240B		- 80	l		V
	: BD240C		- 100			V
CEO	Collector Cut-off Current : BD240/A	$V_{CE} = -30V, I_{B} = 0$			- 0.3	mA
	: BD240B/C	$V_{CE} = -60V, I_{B} = 0$	1 '	1	- 0.3	mA
I <sub>CES</sub>	Collector Cut-off Current : BD240	V <sub>CE</sub> = - 45V, V <sub>BE</sub> = 0			- 0.2	mA
	: BD240A	$V_{CE} = -60V, V_{BE} = 0$	1 '	l	- 0.2	mA
	: BD240B	$V_{CE} = -80V, V_{BE} = 0$	1 '		- 0.2	mA
	: BD240C	$V_{CE} = -100V, V_{BE} = 0$	I'		- 0.2	mA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB} = -5V, I_{C} = 0$			- 1	mA
h <sub>FE</sub>	* DC Current Gain	$V_{CE} = -4V, I_{C} = -0.2A$	40			
		$V_{CE} = -4V, I_{C} = -1A$	15			1
V <sub>CE</sub> (sat)	* Collector-Emitter Saturation Voltage	I <sub>C</sub> = - 1A , I <sub>B</sub> = - 0.2A			- 0.7	V
V <sub>BE</sub> (on)	* Base-Emitter ON Voltage	$V_{CE} = -4V, I_{C} = -1A$	1		- 1.3	V

BD240/A/B/C

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Rev. A, February 2000

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