

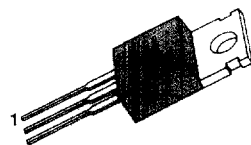
MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS

- Complement to BD239/A/B/C respectively

ABSOLUTE MAXIMUM RATINGS

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

TO-220



1. Base 2. Collector 3. Emitter

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
* Collector Emitter Sustaining Voltage : BD240	$V_{CEO(sus)}$	$I_C = -30\text{mA}, I_B = 0$	-45			V
: BD240A			- 60			V
: BD240B			- 80			V
: BD240C			- 100			V
Collector Cutoff Current	I_{CEO}	$V_{CE} = -30\text{V}, I_B = 0$			- 0.3	mA
: BD240/A					- 0.3	mA
Collector Cutoff Current	I_{CES}	$V_{CE} = -45\text{V}, V_{BE} = 0$			- 0.2	mA
: BD240					- 0.2	mA
: BD240A					- 0.2	mA
: BD240B					- 0.2	mA
	I_{CES}	$V_{CE} = -80\text{V}, V_{BE} = 0$			- 0.2	mA
: BD240C					- 0.2	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			- 1	mA
* DC Current Gain	h_{FE}	$V_{CE} = -4\text{V}, I_C = -0.2\text{A}$	40			
			15			
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1\text{A}, I_B = -0.2\text{A}$			- 0.7	V
* Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -4\text{V}, I_C = -1\text{A}$			- 1.3	V

* Pulse Test : PW = 350uS, duty Cycle \leq 2.0% Pulsed