

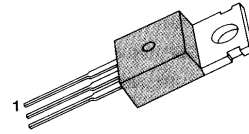
### MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS

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

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

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