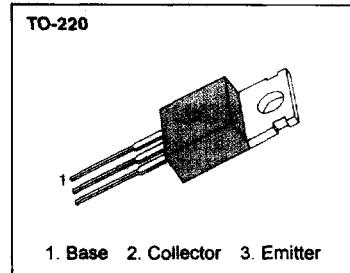


### MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS

- Complement to BD242/A/B/C respectively

### ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage : BD241	$V_{CEO}$	45	V
: BD241A		60	V
: BD241B		80	V
: BD241C		100	V
Collector Emitter Voltage : BD241	$V_{CER}$	55	V
: BD241A		70	V
: BD241B		90	V
: BD241C		115	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current (DC)	$I_C$	3	A
Collector Current (Pulse)	$I_C$	5	A
Base Current	$I_B$	1	A
Collector Dissipation ( $T_C=25^\circ\text{C}$ )	$P_C$	40	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 ~ 150	$^\circ\text{C}$



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

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

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