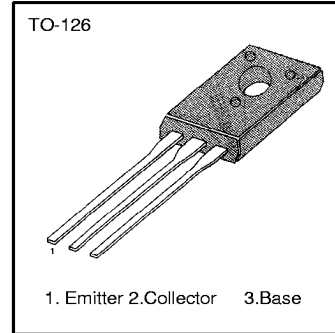


MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS

• Complement to BD 234/236/238 respectively

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage : BD233	V_{CBO}	45	V
: BD235		60	V
: BD237		100	V
Collector Emitter Voltage : BD233	V_{CEO}	45	V
: BD235		60	V
: BD237		80	V
Collector Emitter Voltage : BD233	V_{CER}	45	V
: BD235		60	V
: BD237		100	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	2	A
Collector Current (Pulse)	I_C	6	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	25	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ\text{C}$

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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
* Collector Emitter Sustaining Voltage : BD233	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	45			V
: BD235			60			V
: BD237			80			V
Collector Cutoff Current : BD233	I_{CBO}	$V_{CB} = 45\text{V}, I_E = 0$			100	μA
: BD235		$V_{CB} = 60\text{V}, I_E = 0$			100	μA
: BD237		$V_{CB} = 100\text{V}, I_E = 0$			100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			1	mA
* DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 150\text{mA}$	40			
		$V_{CE} = 2\text{V}, I_C = 1\text{A}$	25			
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}, I_B = 0.1\text{A}$			0.6	V
* Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 2\text{V}, I_C = 1\text{A}$			1.3	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10\text{V}, I_C = 250\text{mA}$	3			MHz

* Pulse Test: PW=300 μs , duty Cycles \leq 1.5% Pulsed

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Rev. B

