



TO-126 Plastic-Encapsulate Transistors

BD233/235/237 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 1.25 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 2 A

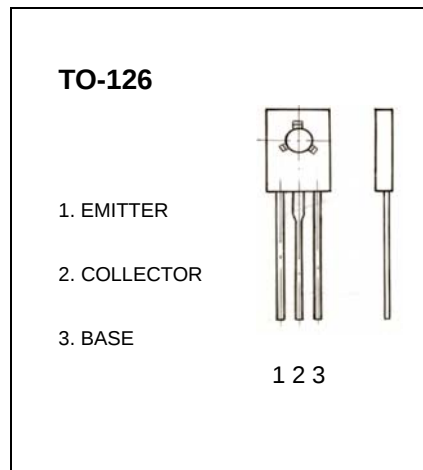
Collector-base voltage

$V_{(BR)CBO}$: BD233 : 45 V
BD235: 60 V
BD237: 100 V

Operating and storage junction temperature range

T_J : $150^{\circ}C$

T_{stg} : $-65^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BD233 BD235 BD237	$V_{(BR)CBO}$ $I_C = 100\mu A, I_E = 0$	45 60 100		V
Collector-emitter breakdown voltage	BD233 BD235 BD237	$V_{(BR)CEO}$ $I_C = 10mA, I_B = 0$	45 60 80		V
Emitter-base breakdown voltage		$V_{(BR)EBO}$ $I_E = 100\mu A, I_C = 0$	5		V
Collector cut-off current	BD233 BD235 BD237	I_{CBO} $V_{CB} = 45V, I_E = 0$ $V_{CB} = 60V, I_E = 0$ $V_{CB} = 80V, I_E = 0$		100	μA
Emitter cut-off current		I_{EBO} $V_{EB} = 5V, I_C = 0$		1	mA
DC current gain		$H_{FE(1)}$ $V_{CE} = 2V, I_C = 150mA$	40		
		$H_{FE(2)}$ $V_{CE} = 2V, I_C = 1A$	25		
Collector-emitter saturation voltage		$V_{CE(sat)}$ $I_C = 1A, I_B = 100mA$		0.6	V
Transition frequency		f_T $V_{CE} = 10V, I_C = 250mA$ $f = 10MHz$	3		MHz