



TO-126 Plastic-Encapsulate Transistors

BD235 TRANSISTOR (NPN)

FEATURES

Power dissipation

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

Collector current

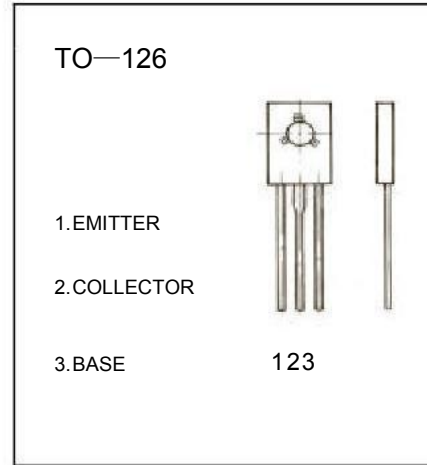
I_{CM} : 2 A

Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-basebreakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	60			V
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C=10mA, I_B=0$	60			V
Emitter-basebreakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			1	μA
DC currentgain	$h_{FE(1)}$	$V_{CE}=2V, I_C=150mA$	40			
DC currentgain	$h_{FE(2)}$	$V_{CE}=2V, I_C=1A$	25			
Collector-emittersaturationvoltage	$V_{CE(sat)}$	$I_C=1A, I_B=100mA$			0.6	V
Transitionfrequency	f_T	$V_{CE}=10V, I_C=250mA$ $f=10MHz$	3			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	1	2	3
Range	40-100	63-160	100-250

