



# TO-126 Plastic-Encapsulate Transistors

## BD140 TRANSISTOR ( PNP )

### FEATURES

Power dissipation

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

Collector current

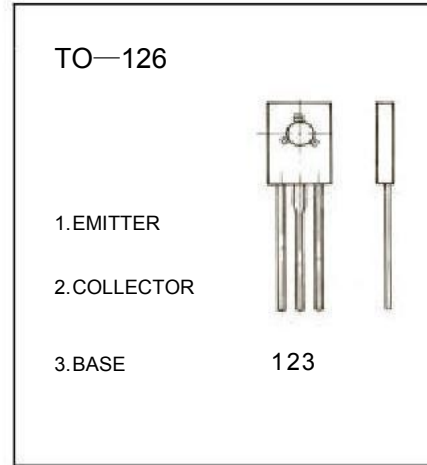
$I_{CM}$ : -1.5 A

Collector-base voltage

$V_{(BR)CBO}$ : -80 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	$V_{(BR)CBO}$	$I_C=-0.1\mu A, I_E=0$	-80			V
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C=-0.03A, I_B=0$	-80			V
Emitter-basebreakdown voltage	$V_{(BR)EBO}$	$I_E=-0.1mA, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-30V, I_E=0$			-0.1	$\mu A$
<b>Emitter cut-off current</b>	$I_{EBO}$	$V_{EB}=-5V, I_C=0$			-10	$\mu A$
DC currentgain	$h_{FE(1)}$	$V_{CE}=-2V, I_C=-150mA$	40		250	
DC currentgain	$h_{FE(2)}$	$V_{CE}=-2V, I_C=-5mA$	25			
DC currentgain	$h_{FE(3)}$	$V_{CE}=-2V, I_C=-500mA$	-25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-50mA$			-0.5	V
Base-emitter voltage	$V_{BE}$	$I_C=-500mA, V_{CE}=-2V$			-1	V

### CLASSIFICATION OF $h_{FE(1)}$

Rank	6	10	16
Range	40-100	63-160	100-250



