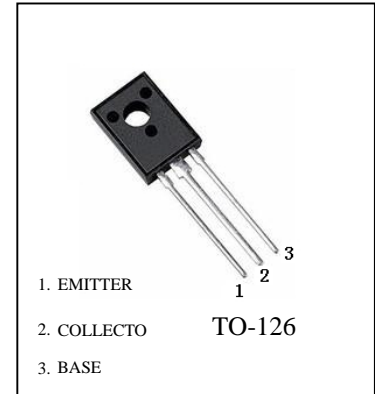


FEATURES

- High Current
- Complement To BD135, BD137 And BD139

BD136/138/140 (PNP)



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	BD136	-45
		BD138	-60
		BD140	-80
V _{CEO}	Collector-Emitter Voltage	BD136	-45
		BD138	-60
		BD140	-80
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-1.5	A
P _C	Collector Power Dissipation	1.25	W
R _{θJA}	Thermal Resistance From Junction To Ambient	100	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -0.1mA, I _E =0				V
BD136			-45			
BD138			-60			
BD140			-80			
Collector-emitter sustaining voltage	V _{CEO(SUS)} *	I _C =-0.03A, I _B =0				V
BD136			-45			
BD138			-60			
BD140			-80			
Emitter-base breakdown 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	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-10	μA
DC current gain	h _{FE(1)} *	V _{CE} =-2V, I _C =-150mA	40		250	
	h _{FE(2)} *	V _{CE} =-2V, I _C =-5mA	25			
	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} *	V _{CE} =-2V, I _C =-500mA			-1	V

*Pulse test: pulse width ≤350μs, duty cycles ≤ 2.0%.

CLASSIFICATION OF h_{FE(1)}

RANK	6	10	16
RANGE	40-100	63-160	100-250

BD136/138/140

Typical Characteristics

