

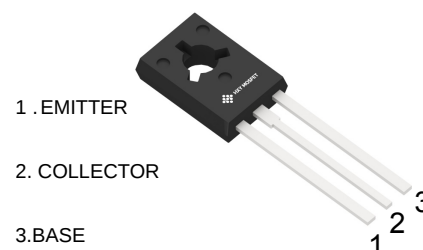


Features

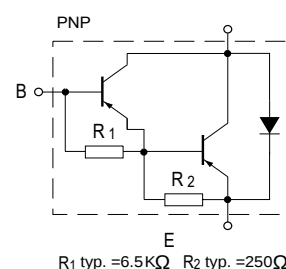
- Complement To BD679,681

Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
BD680ASTU /BD682ASTU	TO-126	Bulk	200



TO-126



Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Base Voltage		-100	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Collector-Emitter Voltage		-100	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-4	A
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

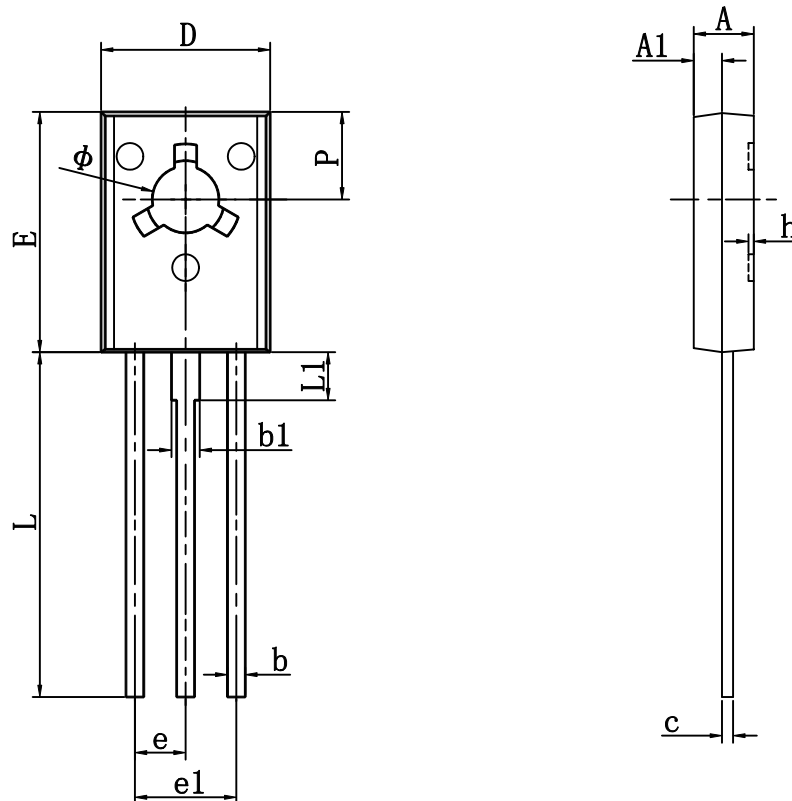


Electrical Characteristics(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage BD680ASTU BD682ASTU	$V_{(BR)CBO}$	$I_C = 0.1mA, I_E = 0$	-80 -100			V
Collector-emitter breakdown voltage BD680ASTU BD682ASTU	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	-80 -100			V
Base-emitter breakdown voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 100V, I_E = 0$			-1	uA
Collector cut-off current	I_{CEO}	$V_{CE} = 100V, I_B = 0$			-1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = 10V, I_C = 0$		-1.3	-2.5	mA
DC current gain	$h_{FE(3)}$	$V_{CE} = 5V, I_C = 2A$	2000		15000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 12mA$		-1.2	-1.8	V



TO-18 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.450	0.600	0.018	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
φ	3.000	3.200	0.118	0.126



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