

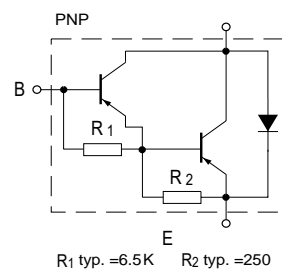
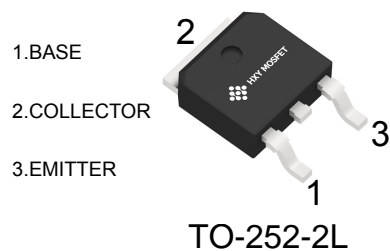


## Features

- Complement To BD679,BD681

## Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
BD680/BD682	TO-252-2L	Tape and Reel	2500



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

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	BD680 BD682 $V_{CBO}$	-80 -100	V
Collector-Emitter Voltage	BD680 BD682 $V_{CEO}$	-80 -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

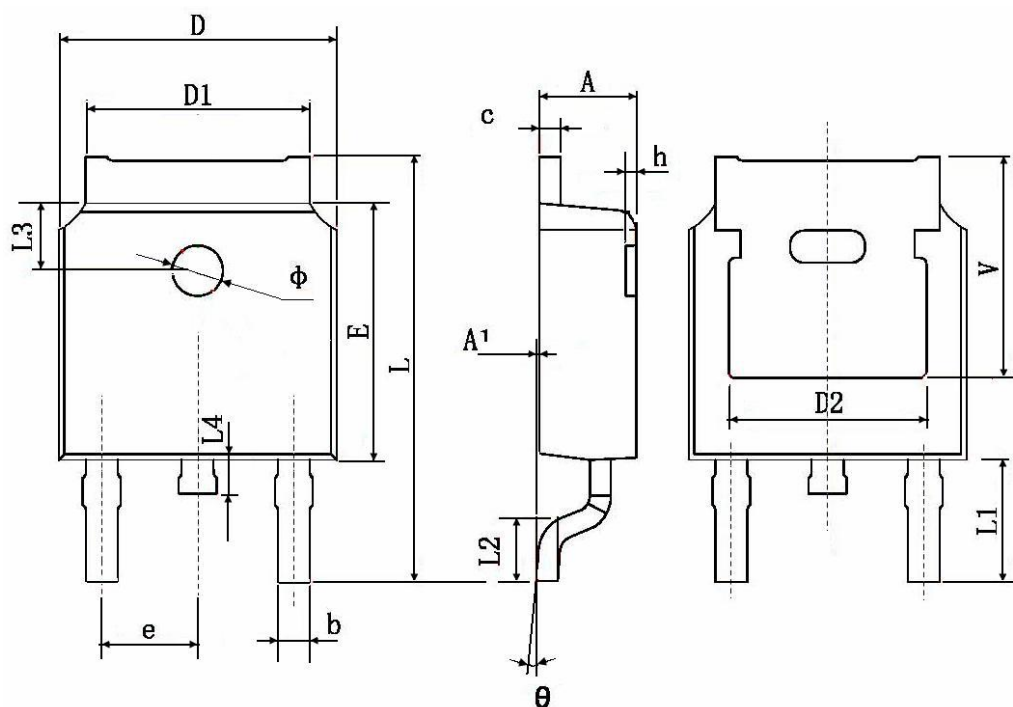


**Electrical Characteristics(Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BD680 BD682 $V_{(BR)CBO}$	$I_C = -0.1mA, I_E = 0$	-80 -100			V
Collector-emitter breakdown voltage	BD680 BD682 $V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-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-252-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.660	0.860	0.026	0.034
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	0.483 TYP.		0.190 TYP.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 TYP.		0.114 TYP.	
L2	1.400	1.700	0.055	0.067
L3	1.600 TYP.		0.063 TYP.	
L4	0.600	1.000	0.024	0.039
$\Phi$	1.100	1.300	0.043	0.051
$\theta$	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 TYP.		0.211 TYP.	



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