BD434 – BD436 – BD438

SILICON PNP POWER TRANSISTORS.

The BD434-BD436-BD438 are PNP Transistors mounted in Jedec TO-126 plastic package.
They are recommended for use in medium power linear and switching applications.
NPN complements are BD433-BD435-BD437.
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CBO}	Collector-Base Voltage (I_E= 0)	BD434	-22	V
		BD436	-32	
		BD438	-45	
V_{CEO}	Collector-Emitter Voltage (I_B= 0)	BD434	-22	V
		BD436	-32	
		BD438	-45	
V_{EBO}	Emitter-Base Voltage (I_C= 0)		-5	V
I_C	Collector Current		-4	A
I_{CM}	Collector Current Peak		-7	
I_B	Base Current		-1	A
P_C	Total power Dissipation	T_C = 25°C	36	W
T_J	Junction Temperature		150	°C
T_{Stg}	Storage Temperature		-65 to +150	°C

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-c}	Thermal Resistance, Junction-Case	3.5	°C/W
R_{thJ-a}	Thermal Resistance, Junction-ambient in free air	100	°C/W

BD434 – BD436 – BD438

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

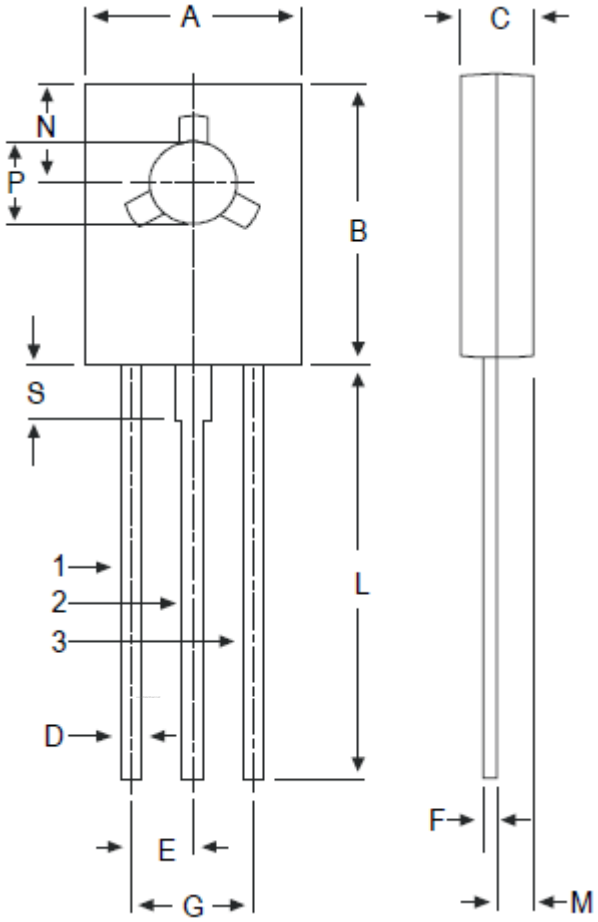
Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
I_{CBO}	Collector cut-off current	I_E= 0, V_{CB}= -22 V	BD434	-	-	-100	µA
		I_E= 0, V_{CB}= -32 V	BD436				
		I_E= 0, V_{CB}= -45 V	BD438				
I_{CES}	Collector cut-off current	V_{BE}= 0, V_{CE}= -22 V	BD434	-	-	-100	
		V_{BE}= 0, V_{CE}= -32 V	BD436				
		V_{BE}= 0, V_{CE}= -45 V	BD438				
I_{EBO}	Emitter cut-offcurrent	I_C= 0 V_{EB}= -5 V	BD434	-	-	-1	mA
			BD436				
			BD438				
$V_{CEO(SUS)}$	Collector-Emitter sustaning Voltage (*)	I_B= 0 I_C= -100 mA	BD434	-22	-	-	V
			BD436	-32	-	-	
			BD438	-45	-	-	
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C= -2 A I_B= -200 mA	BD434	-	-	-0.5	V
			BD436				
			BD438			-0.6	
V_{BE}	Base-Emitter Voltage(*)	I_C= -2 A V_{CE}= -1 V	BD434	-	-	-1.1	V
			BD436				
			BD438			-1.2	
h_{FE}	DC Current Gain (*)	I_C= -10 mA V_{CE}= -5 V	BD434	40	-	130	-
			BD436				
			BD438	30	-	130	
		I_C= -500 mA V_{CE}= -1 V	BD434	85	-	140	
			BD436				
			BD438				
		I_C= -2 A V_{CE}= -1 V	BD434	50	-	-	
			BD436				
			BD438	40	-	-	
f_T	Transition frequency	I_C= -250 mA V_{CE}= -1 V	BD434	3	-	-	MHz
			BD436				
			BD438				

1. Measured under pulse conditions :t_P <300µs, δ <1.5

BD434 – BD436 – BD438

MECHANICAL DATA CASE TO-126

	DIMENSIONS	
	min	max
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 typ.	
F	0.49	0.75
G	4.4 typ.	
L	15.7 typ.	
M	1.27 typ.	
N	3.75 typ.	
P	3.0	3.2
S	2.54 typ.	



Pin 1 :	Emitter
Pin 2 :	Collector
Pin 3 :	Base

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