

Silicon PNP Power Transistors

BD534/536/538

DESCRIPTION

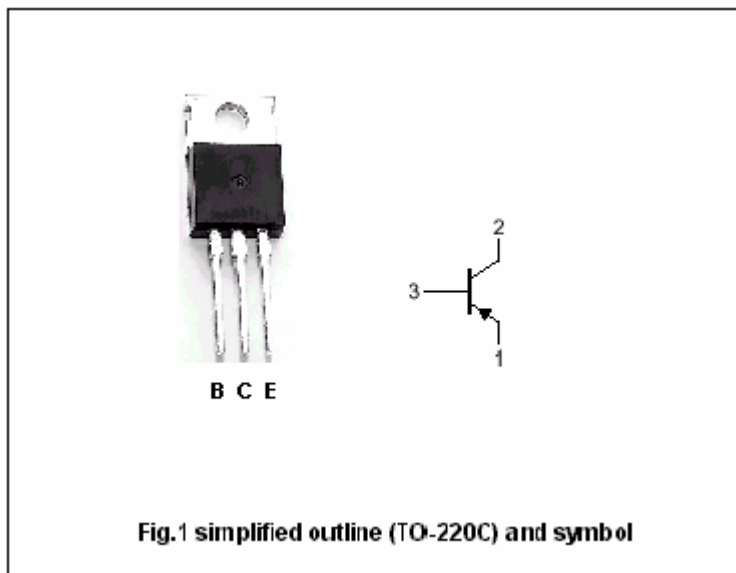
- With TO-220C package
- Complement to type BD533/535/537
- Low saturation voltage

APPLICATIONS

- For medium power linear and switching applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	BD534	Open emitter-	-45	V
		BD536		-60	
		BD538		-80	
V_{CEO}	Collector-emitter voltage	BD534	Open base	-45	V
		BD536		-60	
		BD538		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-8	A
I_E	Emitter current			-8	A
I_B	Base current			-1	A
P_C	Collector power dissipation		$T_C=25^\circ\text{C}$	50	W
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~150	℃

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CHARACTERISTICS

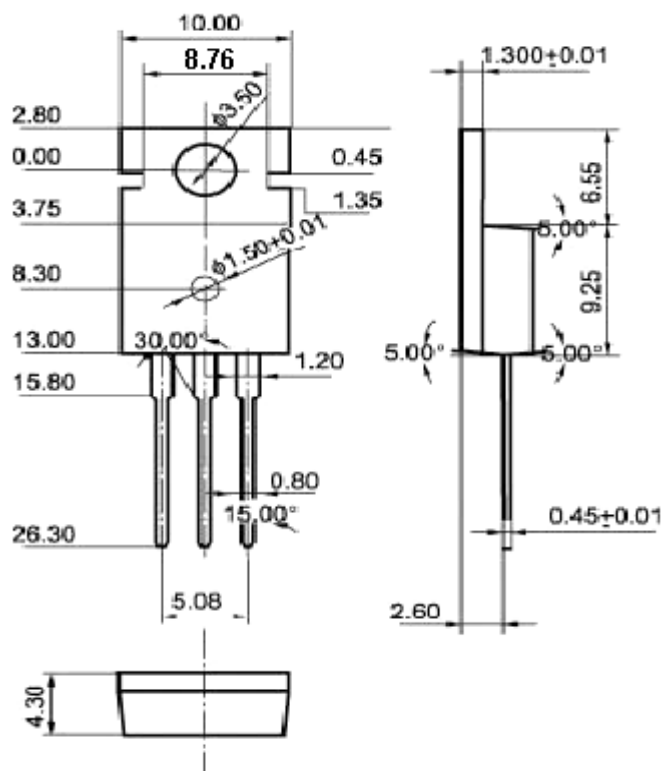
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =-2 A; I _B =-0.2 A			-0.8	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =-6 A; I _B =-0.6 A		-0.8		V
V _{BE}	Base-emitter on voltage		I _C =-2A ; V _{CE} =-2V			-1.5	V
I _{CBO}	Collector cut-off current	BD534	V _{CB} =-45V; I _E =0			-0.1	mA
		BD536	V _{CB} =-60V; I _E =0				
		BD538	V _{CB} =-80V; I _E =0				
I _{CES}	Collector cut-off current	BD534	V _{CE} =-45V; V _{BE} =0			-0.1	mA
		BD536	V _{CE} =-60V; V _{BE} =0				
		BD538	V _{CE} =-80V; V _{BE} =0				
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			-1	mA
h _{FE-1}	DC current gain	BD534/536	I _C =-10mA ; V _{CE} =-5V	20			
		BD538		15			
h _{FE-2}	DC current gain		I _C =-0.5A ; V _{CE} =-2V	40			
h _{FE-3}	DC current gain (All device)	Group: J	I _C =-2A ; V _{CE} =-2V	30		75	
		Group: K		40		100	
h _{FE-4}	DC current gain (All device)	Group: J	I _C =-3A ; V _{CE} =-2V	15			
		Group: K		20			
f _T	Transition frequency		I _C =-0.5A ; V _{CE} =-1V	3	12		MHz

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)