



DHA®

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BU931ZM

NPN Power Darlington Transistor

Applications

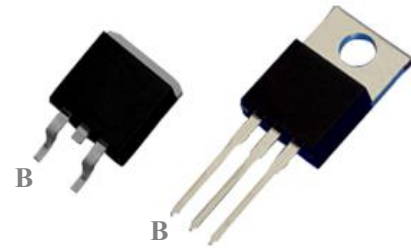
Used to drive the motor and control the inductive device.

Features

- Including clamping zener & freewheeling diodes

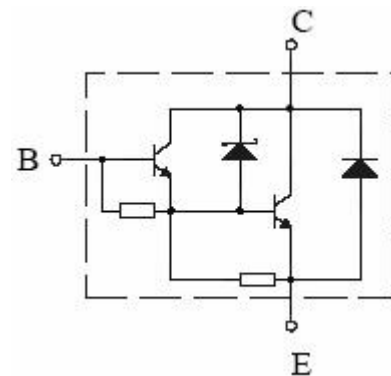
Absolute maximum ratings

Symbol	Parameter	Unit	Value
V _{cb0}	Collector-base voltage	V	350
V _{ce0}	Collector-emitter voltage	V	350
V _{eb0}	Emitter-base voltage	V	5
I _c	Collector current	A	10
I _{cm}	Collector peak current	A	15
I _b	Base current	A	1
I _{bm}	Base peak current	A	2
P _{tot}	Power dissipation T _c =25°C/With heat sink	W	150
T _j	Junction temperature	°C	175
T _{stg}	Storage temperature	°C	-65 ~ 175



TO-263-2L

TO-220



Internal Equivalent Circuit

Electrical parameters (T_{amb} = 25°C)

Symbol	Parameter	Unit	Value	Test conditions
I _{ce0}	Collector-emitter current	μA	≤50	V _{ce} =300V
V _{ce0}	Collector-emitter voltage	V	≥350	I _c =100mA I _b =0
I _{eb0}	Emitter-base current	mA	≤20	V _{eb} =5.0V I _{co} =0
V _{ce(sat)}	Collector-emitter saturation voltage	V	≤1.8 ≤1.8	I _c =8A I _b =110mA I _c =10A I _b =250mA
V _{be(sat)}	Base-emitter saturation voltage	V	≤2.2 ≤2.5	I _c =8A I _b =110mA I _c =10A I _b =250mA
h _{FE}	DC current gain		≥300	I _c =5A V _{ce} =5V
V _{fEC}	Diode forward voltage	V	≤2.5	I _f =10A
V _{CL}	Clamping voltage	V	350~500	I _c =100mA