

Silicon NPN Power Transistors

BU911

DESCRIPTION

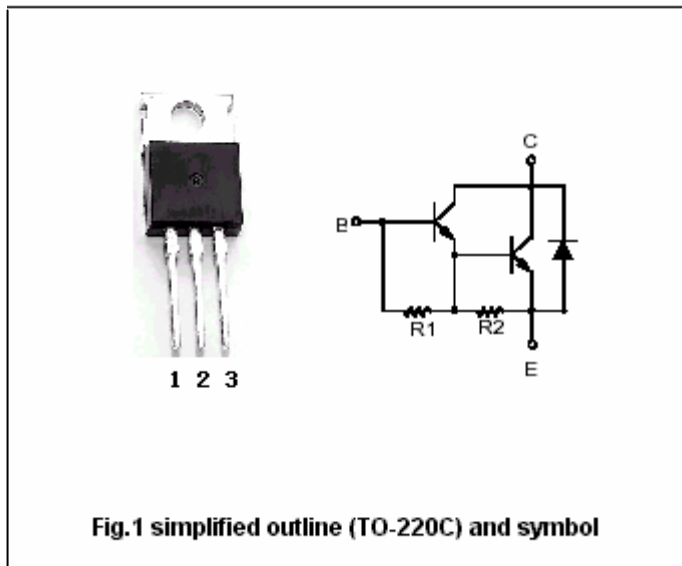
- With TO-220C package
- DARLINGTON

APPLICATIONS

- Solenoid and relay drivers
- Motor control
- Electronic automotive ignition

PINNING

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



Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	450	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current (DC)		6	A
I_{CM}	Collector current (peak)		10	A
I_B	Base current		1	A
P_{tot}	Total power dissipation	$T_C=25^\circ\text{C}$	60	W
T_j	Max.operating junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-case}$	Thermal resistance junction case	2.08	℃/W

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.1 A ; I _B =0; L=10mH	400			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =2.5A ; I _B =50mA			1.8	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =4A ; I _B =200mA			1.8	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =2.5A ; I _B =50mA			2.2	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =4A ; I _B =200mA			2.5	V
I _{CES}	Collector cut-off current	V _{CE} =450V; V _{BE} =0; T _C =125°C			1.0 5.0	mA
I _{CEO}	Collector cut-off current	V _{CE} =400V; I _B =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			5	mA
h _{FE}	DC current gain	I _C =3A ; V _{CE} =5V	500			
V _F	Diode forward voltage	I _F =4A			2.5	V

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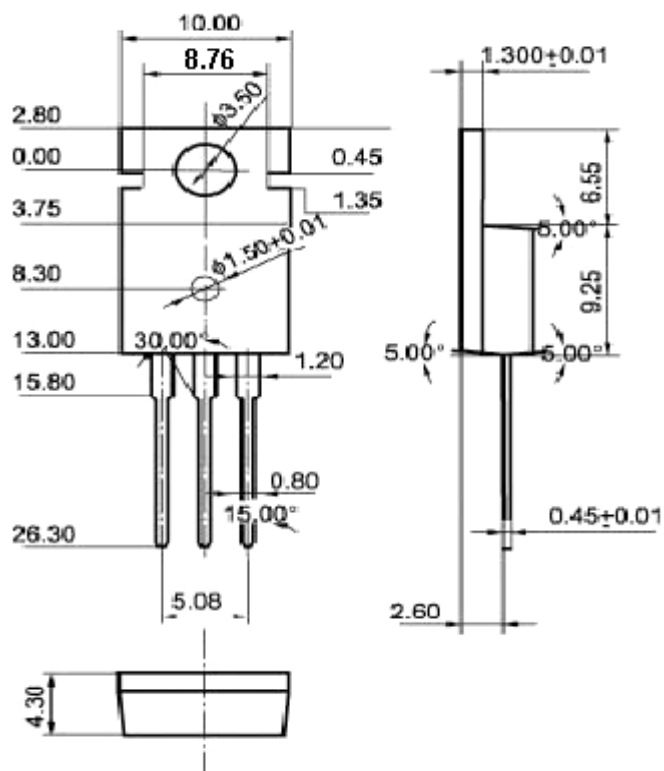


Fig.2 Outline dimensions (unindicated tolerance: 0.1mm)