

Silicon NPN Power Transistors

2SC2827

DESCRIPTION

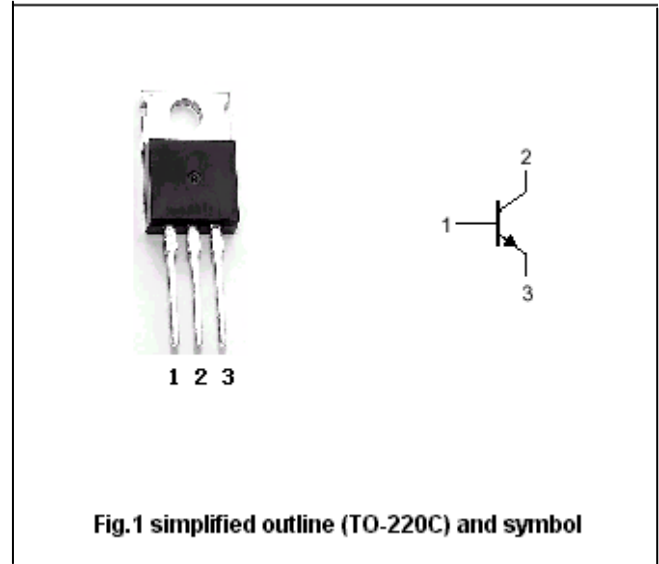
- With TO-220C package
- High breakdown voltage
- Fast switching speed.
- Wide area of safe operation

APPLICATIONS

- 400V/7A switching regulator applications

PINNING

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

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	450	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		6	A
P_C	Collector dissipation	$T_C=25^{\circ}\text{C}$	50	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

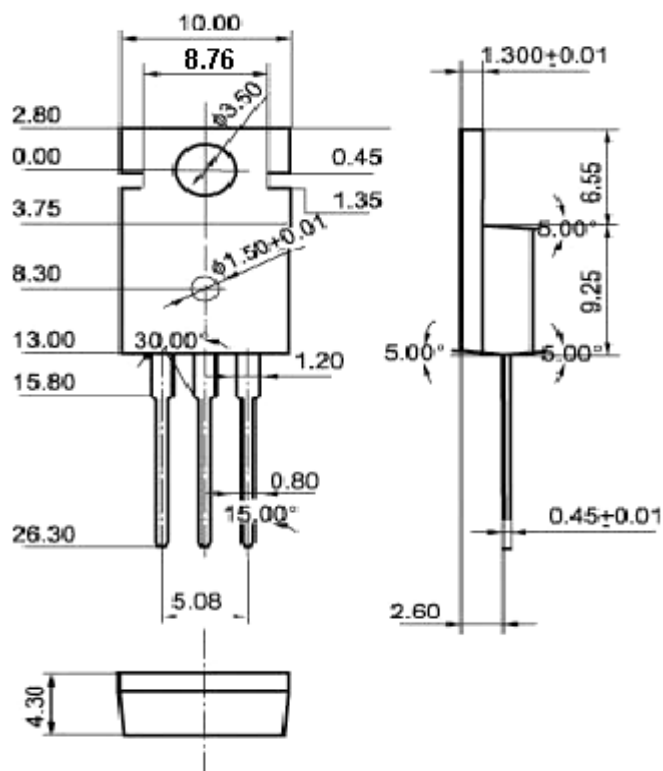
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	450			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	6			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =4A; I _B =0.8A			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =4A; I _B =0.8A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =500V ; I _E =0			100	μ A
I _{CEO}	Collector cut-off current	V _{CE} =450V ; I _B =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			100	μ A
h _{FE}	DC current gain	I _C =3A ; V _{CE} =2V	10			
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V		20		MHz

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PACKAGE OUTLINE

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