

Silicon NPN Power Transistors

2SC3257

DESCRIPTION

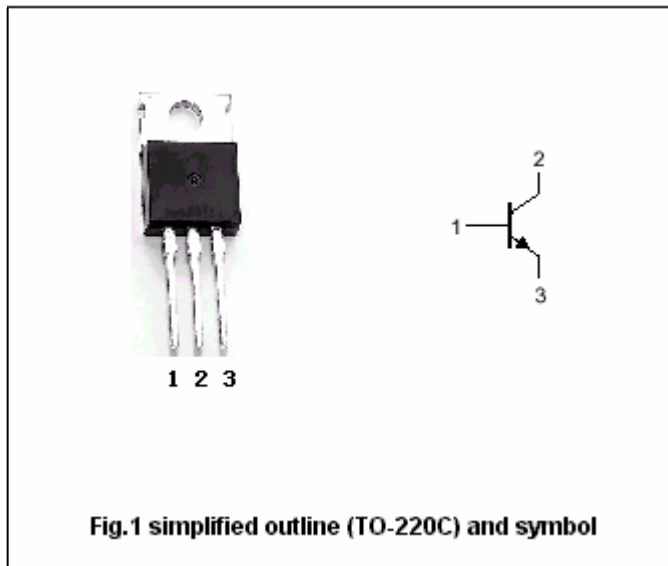
- With TO-220 package
- High collector breakdown voltage
- Excellent switching times

APPLICATIONS

- Switching regulator and high voltage switching applications
- High speed DC-DC converter applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	250	V
V _{CEO}	Collector-emitter voltage	Open base	200	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		10	A
I _{CM}	Collector current-peak		15	A
I _B	Base current		2	A
P _C	Collector power dissipation	T _C =25°C	1.5	W
		T _a =25°C	40	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°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	200			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	250			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A; I _B =0.5A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =0.5A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =200V; I _E =0			100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			1.0	mA
h _{FE-1}	DC current gain	I _C =10mA ; V _{CE} =5V	15			
h _{FE-2}	DC current gain	I _C =5A ; V _{CE} =5V	20		80	

Switching times

t _r	Rise time	I _{B1} =-I _{B2} =0.6A; V _{CC} ≈150V R _L =25Ω			1.0	μs
t _s	Storage time				2.5	μs
t _f	Fall time				1.0	μs

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PACKAGE OUTLINE

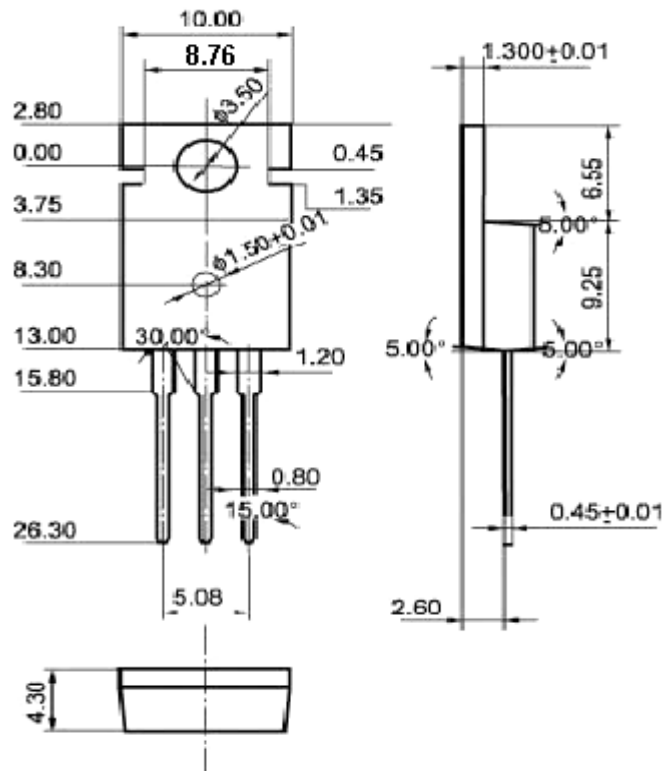


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)