

Silicon NPN Power Transistors

2SC4205

DESCRIPTION

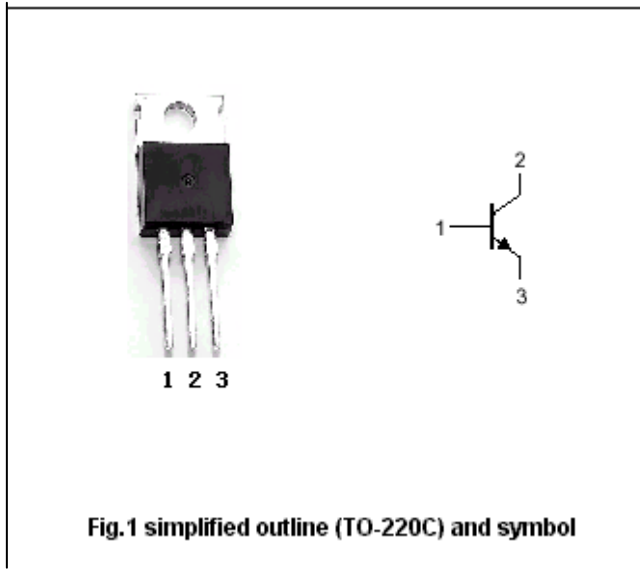
- With TO-220C package
- High voltage ;high speed

APPLICATIONS

- For use in high voltage and power switching 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	400	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		5	A
P_C	Collector dissipation	$T_C=25^\circ C$	40	W
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	400			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA; I _E =0	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	7			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =5A; I _B =1A			1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =400V; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{CE} =7V; I _B =0			10	μ A
h _{FE}	DC current gain	I _C =3A; V _{CE} =5V	16		50	
f _T	Transition frequency	I _C =0.5A; V _{CE} =10V		15		MHz

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PACKAGE OUTLINE

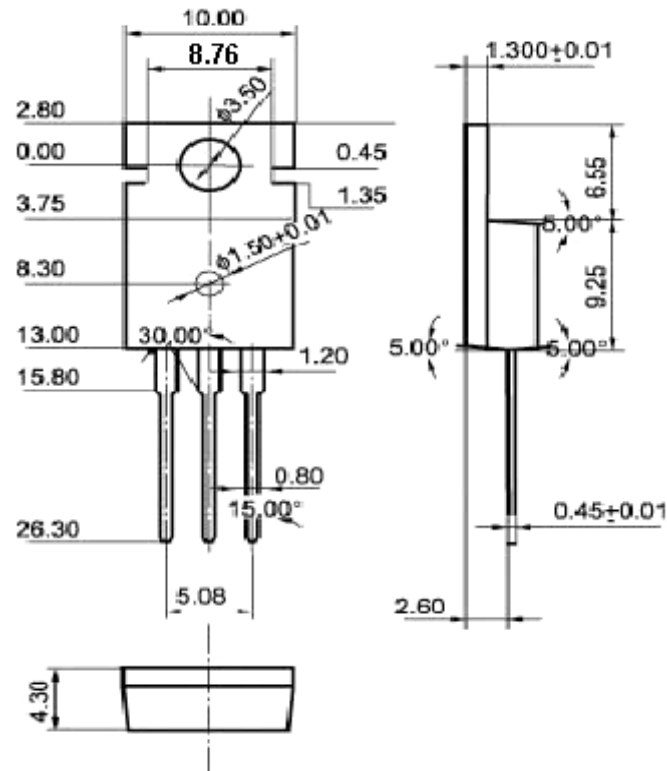


Fig.2 Outline dimensions (unindicated tolerance: ±0.10 mm)