

Silicon NPN Power Transistors

2SC2075

DESCRIPTION

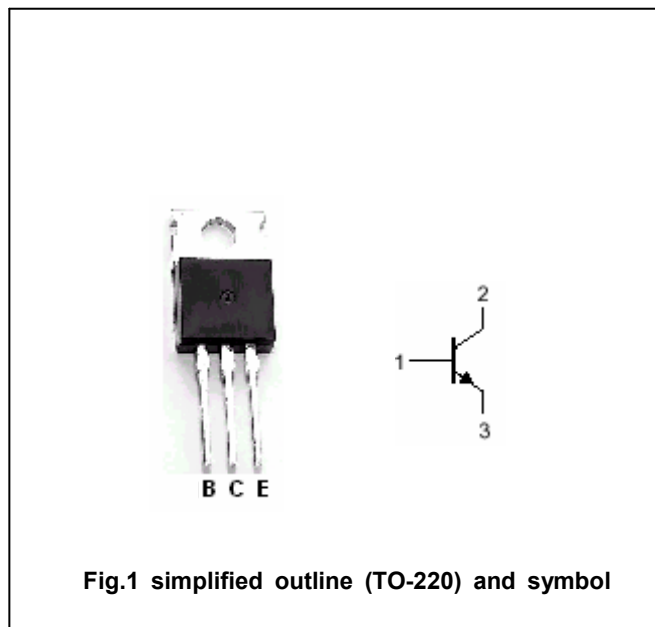
- With TO-220 package
- High transition frequency
- Wide area of safe operation

APPLICATIONS

- 27MHz power amplifier applications
- Recommended for output stage application of AM 4W transmitter

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	80	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	4	V
I_C	Collector current		4	A
I_E	Emitter current		-4	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	10	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 _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.3 A			1.5	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA; I _B =0	80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1.0mA; I _C =0	4			V
I _{CBO}	Collector cut-off current	V _{CB} =30V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V; I _C =0			10	μA
h _{FE-1}	DC current gain	I _C =0.5A ; V _{CE} =5V	25			
h _{FE-2}	DC current gain	I _C =3A ; V _{CE} =2V	15			
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V;f=1MHz		40		pF
f _T	Transition frequency	I _C =0.5A ; V _{CE} =5V		100		MHz

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PACKAGE OUTLINE

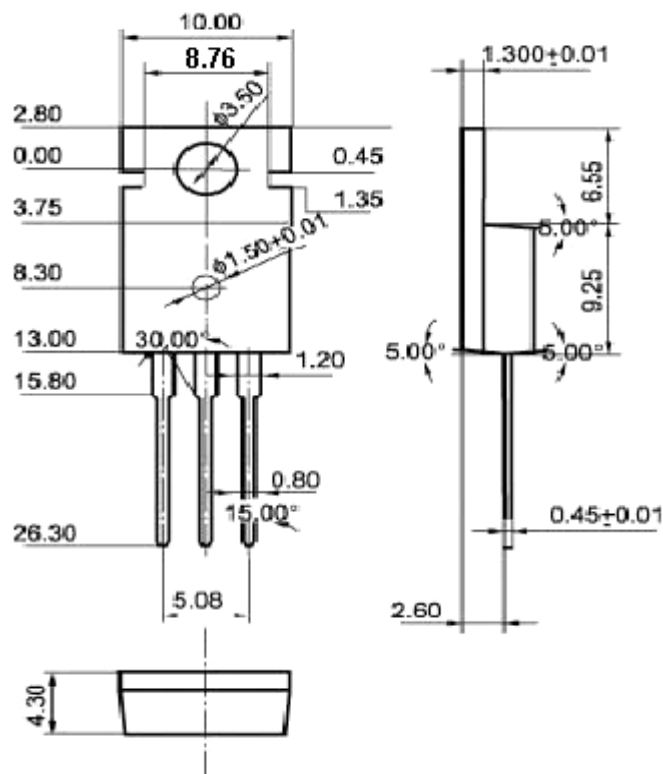


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)