

Silicon NPN Power Transistors

2SD1351

DESCRIPTION

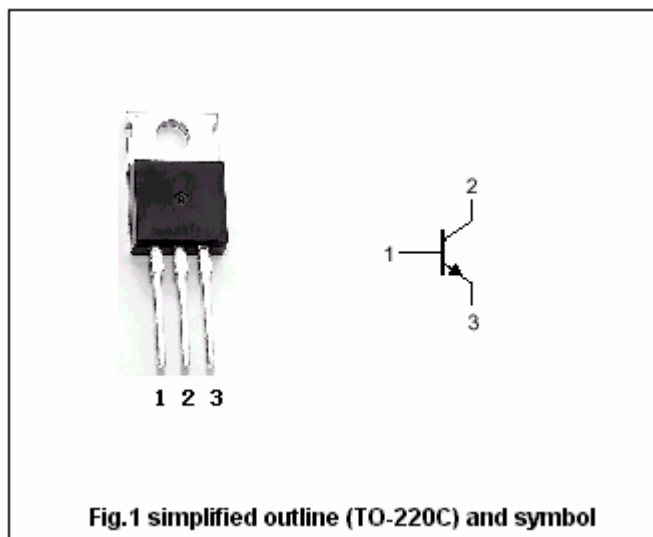
- With TO-220C package
- Complement to type 2SB988
- Low collector saturation voltage

APPLICATIONS

- For general purpose application

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	60	V
V _{CEO}	Collector-emitter voltage	Open base	60	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		3	A
I _B	Base current		0.5	A
P _C	Collector dissipation	T _a =25°C	2	W
		T _C =25°C	30	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-50~150	°C

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CHARACTERISTICS

T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA; I _B =0	60			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =0.2A		0.25	1.0	V
V _{BE}	Base-emitter on voltage	I _C =0.5A; V _{CE} =5V		0.7	1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =60V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =0.5A; V _{CE} =5V	60		300	
C _{ob}	Output capacitance	I _E =0; V _{CB} =10V; f=1MHz		35		pF
f _T	Transition frequency	I _C =0.5A; V _{CE} =5V		3.0		MHz

Switching times

t _{on}	Turn-on time	I _{B1} =-I _{B2} =0.2A V _{CC} =30V; R _L =15Ω Duty cycle≤1%		0.65		μs
t _{stg}	Storage time			1.30		μs
t _f	Fall time			0.65		μs

◆ h_{FE} Classifications

O	Y	GR
60-120	100-200	150-300

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PACKAGE OUTLINE

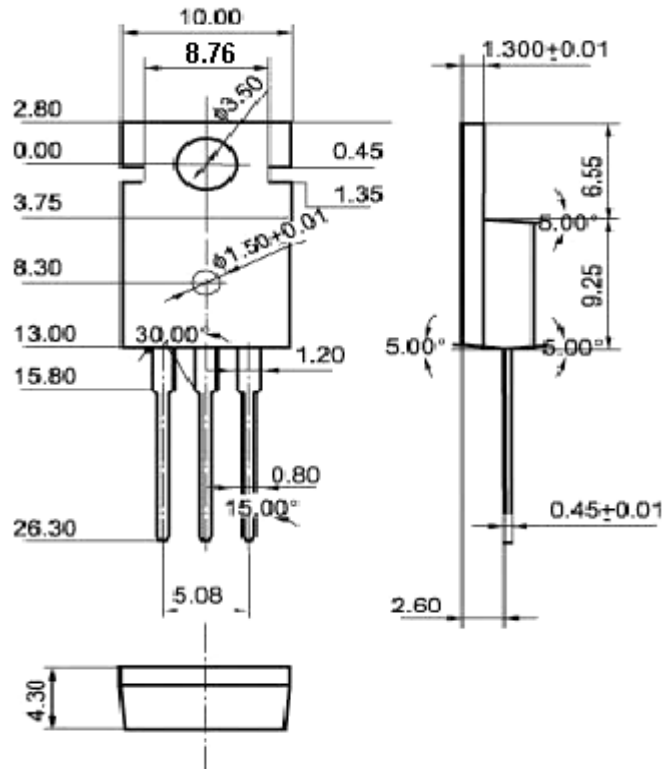


Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)