

Silicon NPN Power Transistors

2SD1351

DESCRIPTION

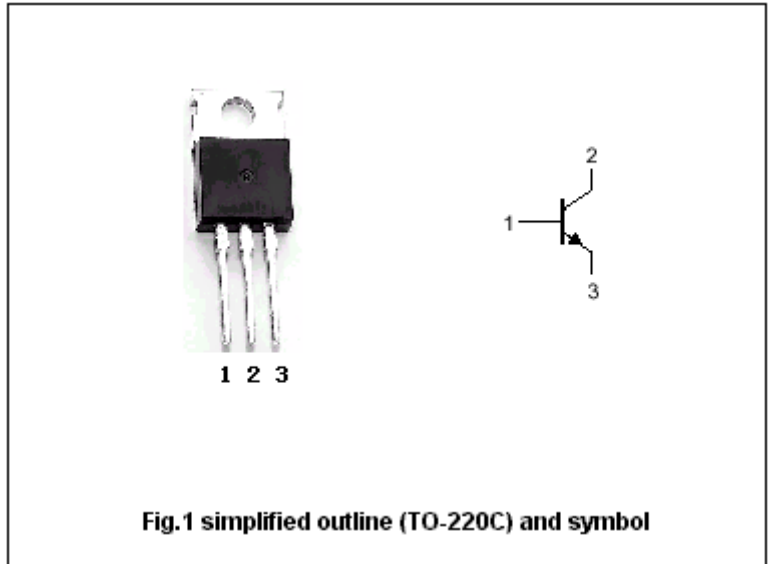
- With TO-220C package
- Complement to type 2SB988
- Low saturation voltage
: $V_{CE(sat)}=1.0V(\text{Max.})(I_C=2.0A, I_B=0.2A)$

APPLICATIONS

- For general purpose application

PINNING

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



Maximum absolute ratings($T_a=25^\circ\text{C}$)

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	$T_a=25$	2	W
		$T_C=25$	30	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-50~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{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}	Emitter-base 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 =15 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

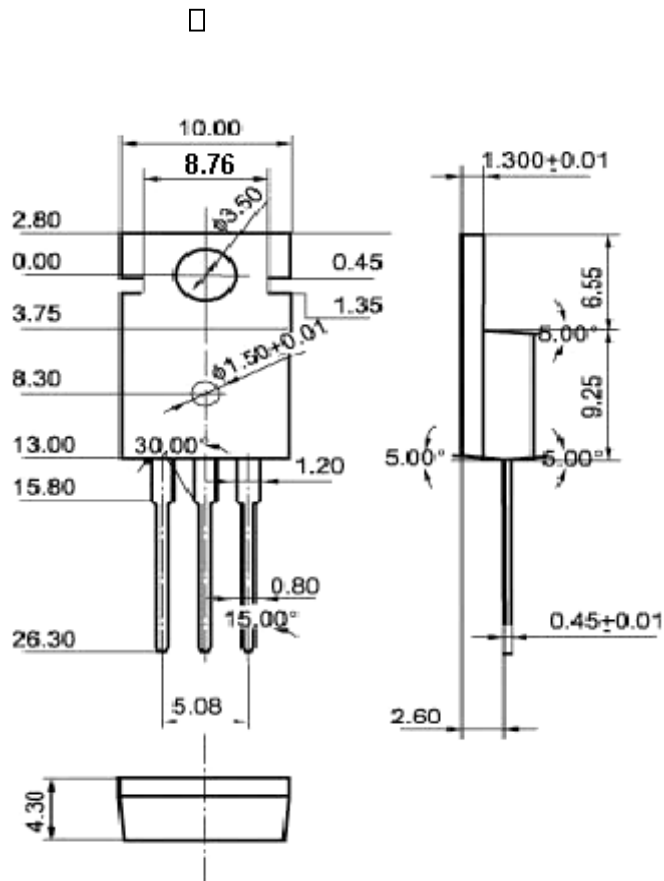


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)