

Silicon NPN Power Transistors

2SC3179

DESCRIPTION

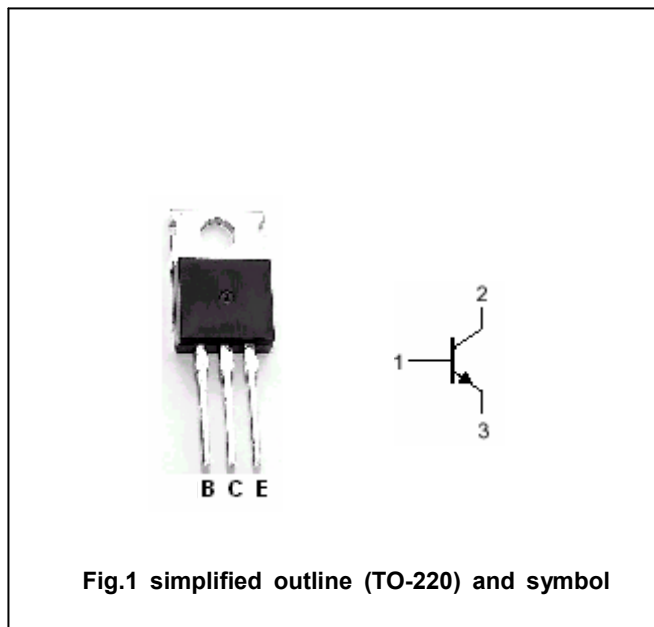
- With TO-220 package
- Complement to type 2SA1262
- Low collector saturation voltage

APPLICATIONS

- Audio and general purpose applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	80	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		4	A
I_B	Base current		1	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=25mA, I_B=0$	60			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=2A; I_B=0.2A$			0.6	V
I_{CBO}	Collector cut-off current	$V_{CB}=80V; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V; I_C=0$			100	μA
h_{FE}	DC current gain	$I_C=1A; V_{CE}=4V$	40			
f_T	Transition frequency	$I_E=-0.2A; V_{CE}=12V$		15		MHz
C_{OB}	Output capacitance	$f=1MHz; V_{CB}=10V$		60		pF

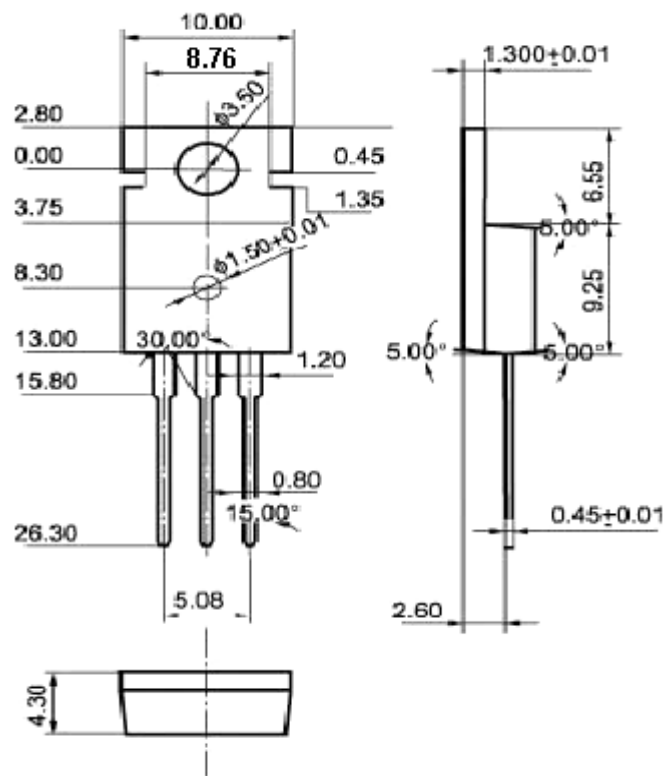
Switching times resistive load

t_{on}	Turn-on time	$I_C=2A, I_{B1}=-I_{B2}=0.2A$ $R_L=10\Omega; V_{CC}=20V$		0.2		μs
t_s	Storage time			1.9		μs
t_f	Fall time			0.29		μs

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PACKAGE OUTLINE

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