

Silicon NPN Power Transistors

2SC2373

**DESCRIPTION**

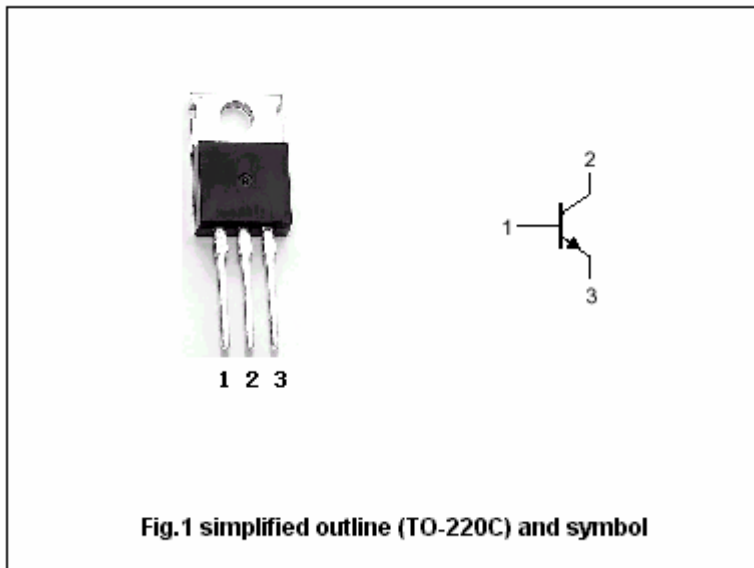
- With TO-220 package
- Low collector saturation voltage
- Fast switching time

**APPLICATIONS**

- For use in horizontal deflection output for B/W TV 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 <sub>CBO</sub>	Collector-base voltage	Open emitter	200	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	100	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		7.5	A
I <sub>CM</sub>	Collector current-peak		15	A
I <sub>B</sub>	Base current		3.0	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	40	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance from junction to case	3.125	°C/W

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5A; I <sub>B</sub> =0.5 A			1.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =5A; I <sub>B</sub> =0.5 A			1.5	V
V <sub>CEO</sub>	Collector-emitter voltage	I <sub>C</sub> =30mA; I <sub>B</sub> =0	100			V
V <sub>EBO</sub>	Emitter-base voltage	I <sub>E</sub> =1.0mA; I <sub>C</sub> =0	7			V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =150V; I <sub>E</sub> =0			10	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			10	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	15		70	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.1A ; V <sub>CE</sub> =5V; f=3.0MHz	5.0			MHz

t <sub>on</sub>	Turn-on time	V <sub>CC</sub> =20V; I <sub>C</sub> =5.0A I <sub>B1</sub> =-I <sub>B2</sub> =0.6A PW=20μs			1.0	μs
t <sub>s</sub>	Storage time				2.5	μs
t <sub>f</sub>	Fall time				1.0	μs

◆ h<sub>FE</sub> classifications

M	L	K
15-35	25-45	35-70

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PACKAGE OUTLINE

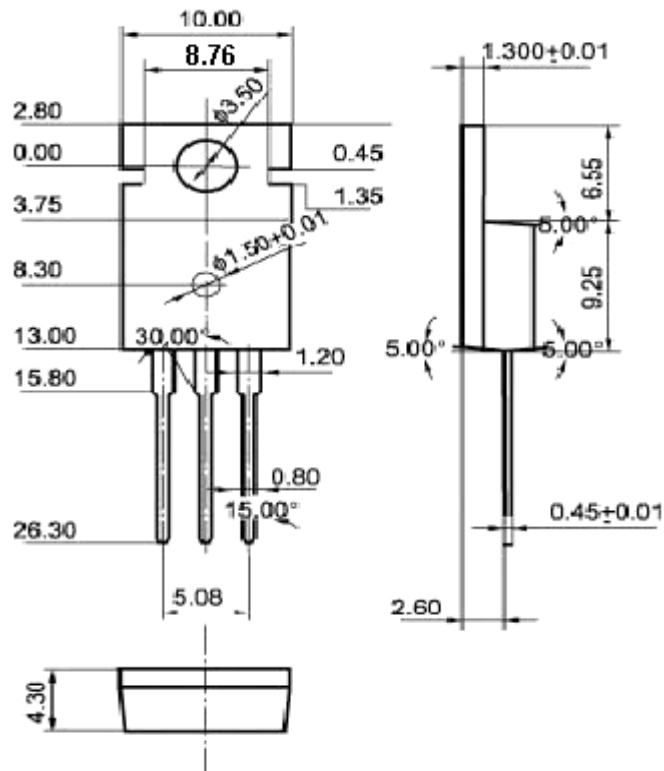


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10$  mm)

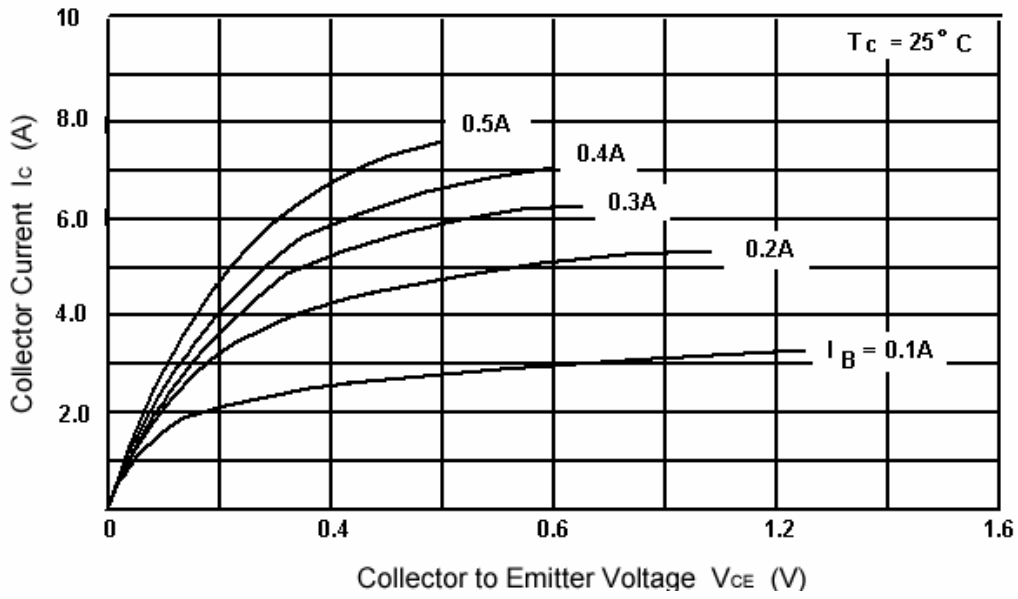


Fig.3 Static Characteristic

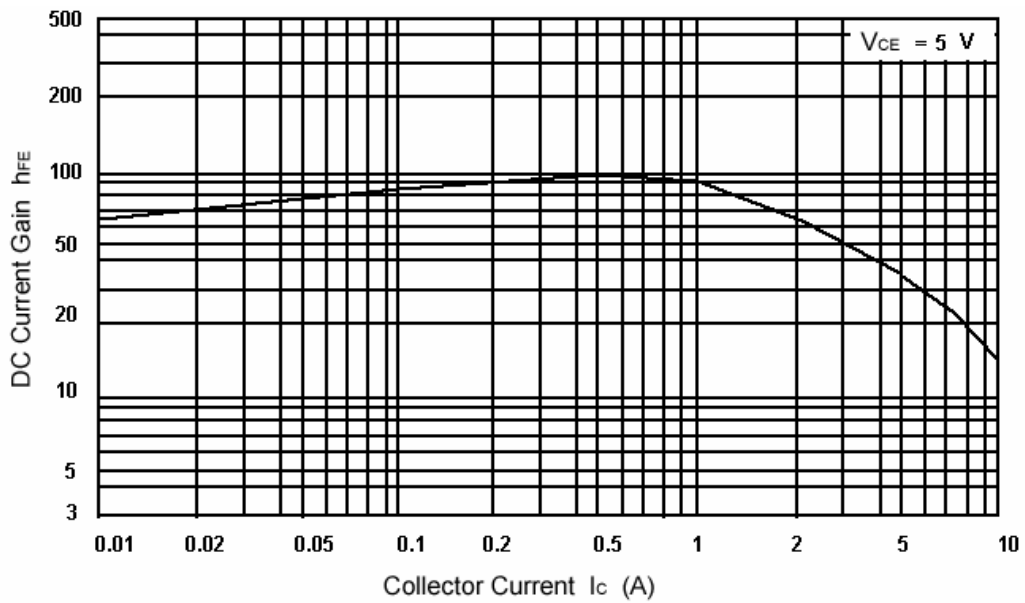


Fig.4 DC current Gain