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

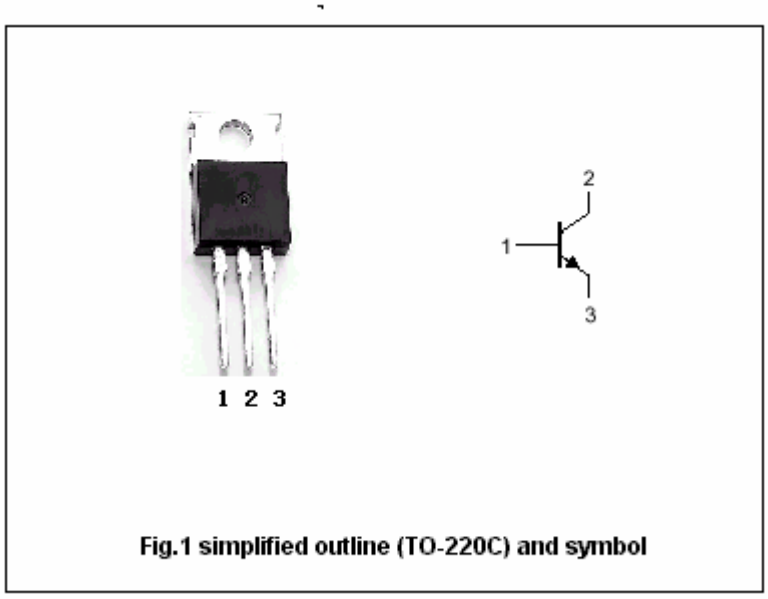


Fig.1 simplified outline (TO-220C) and symbol

PINNING

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

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	200	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		7.5	A
I_{CM}	Collector current-peak		15	A
I_B	Base current		3.0	A
P_C	Collector power dissipation	T_C=25℃	40	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance from junction to case	3.125	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	I_C=5A; I_B=0.5 A			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=5A; I_B=0.5 A			1.5	V
V_{CEO}	Collector-emitter voltage	I_C=30mA; I_B=0	100			V
V_{EBO}	Emitter-base voltage	I_E=1.0mA; I_C=0	7			V
I_{CBO}	Collector cut-off current	V_{CB}=150V;I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	μA
h_{FE}	DC current gain	I_C=5A ; V_{CE}=5V	15		70	
f_T	Transition frequency	I_C=0.1A ; V_{CE}=5V;f=3.0MHz	5.0			MHz

t_{on}	Turn-on time	V_{CC}=20V;I_C=5.0A I_{B1}=-I_{B2}=0.6A PW=20μs			1.0	μs
t_s	Storage time				2.5	μs
t_f	Fall time				1.0	μs

◆ **h_{FE} classifications**

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

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PACKAGE OUTLINE

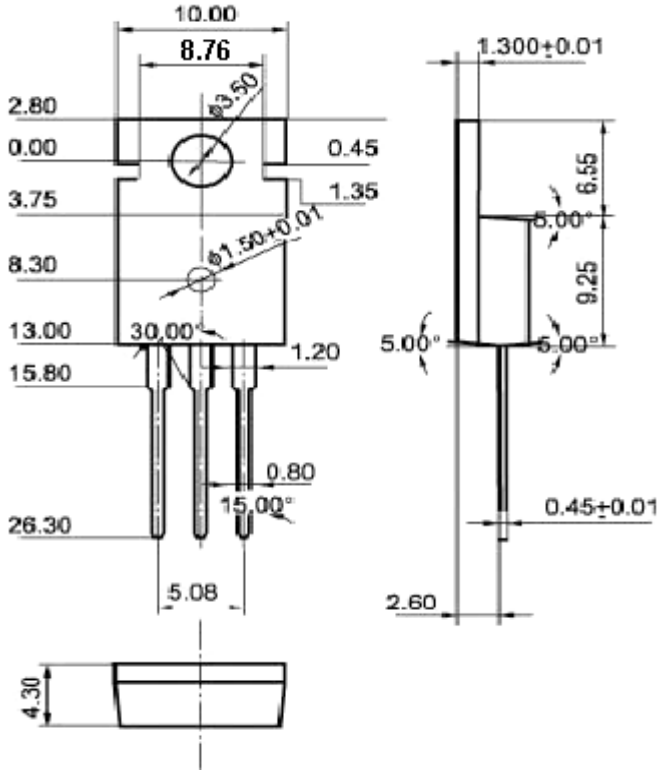


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)

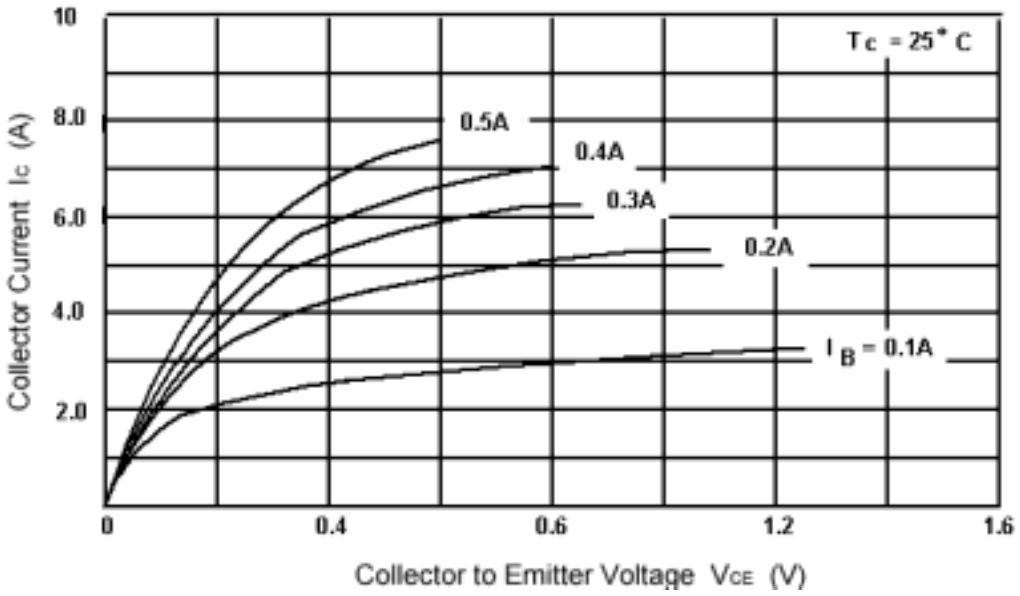


Fig.3 Static Characteristic

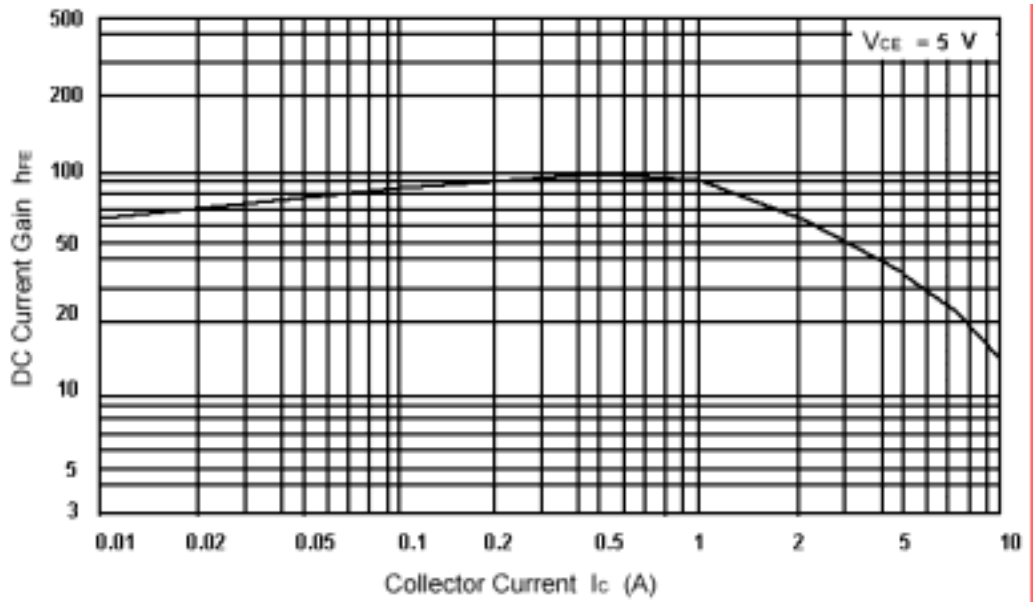


Fig.4 DC current Gain