

Silicon NPN Power Transistors

2SC2373

DESCRIPTION

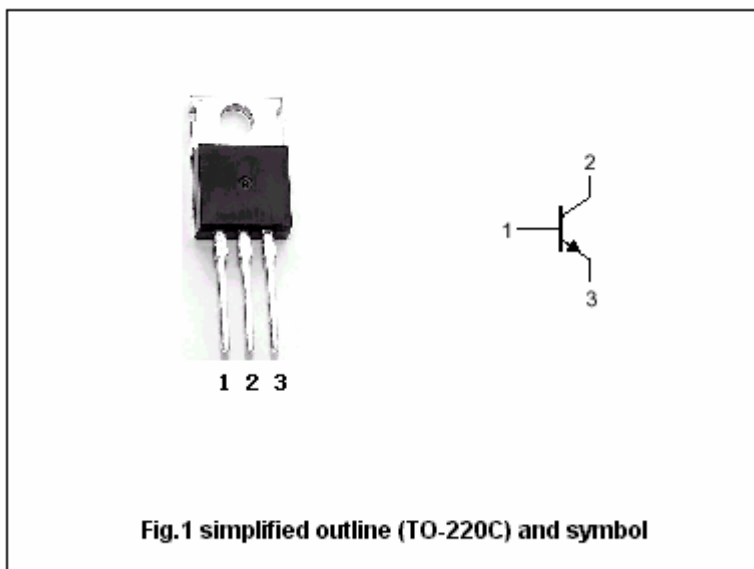
- With TO-220 package
- Low collector saturation voltage
- Fast switching time

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)

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
$R_{th\ j-C}$	Thermal resistance from junction to case	3.125	/W

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CHARACTERISTICS

T_j=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=20 μs			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

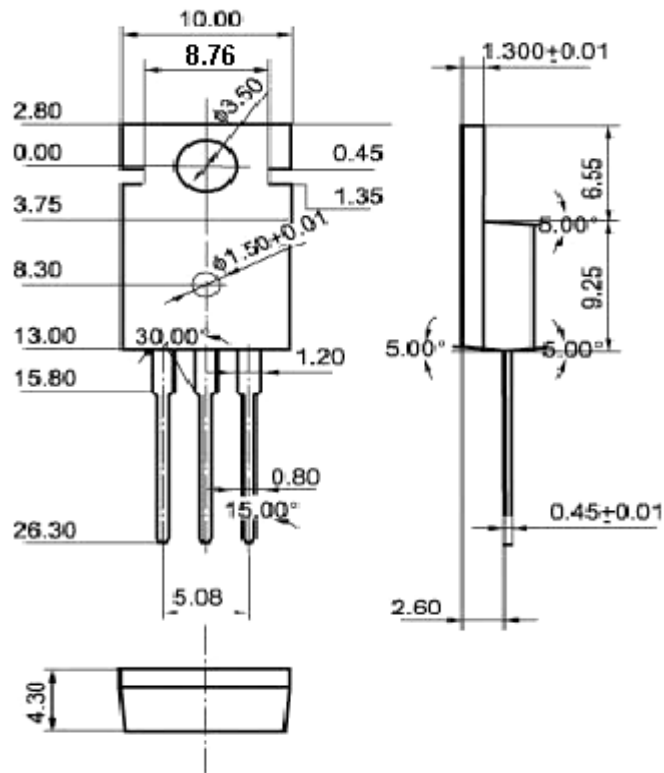


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)

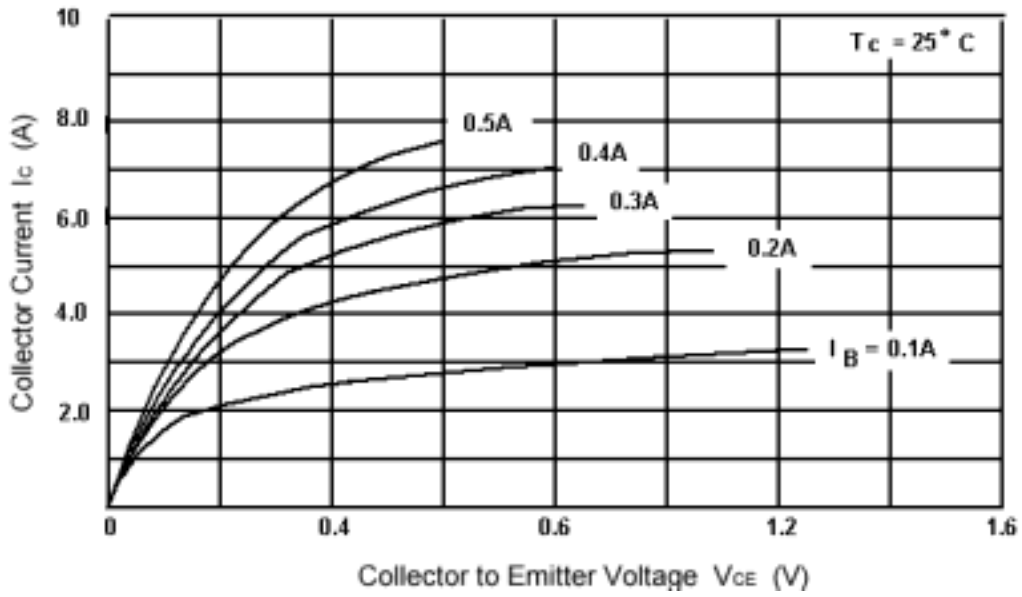


Fig.3 Static Characteristic

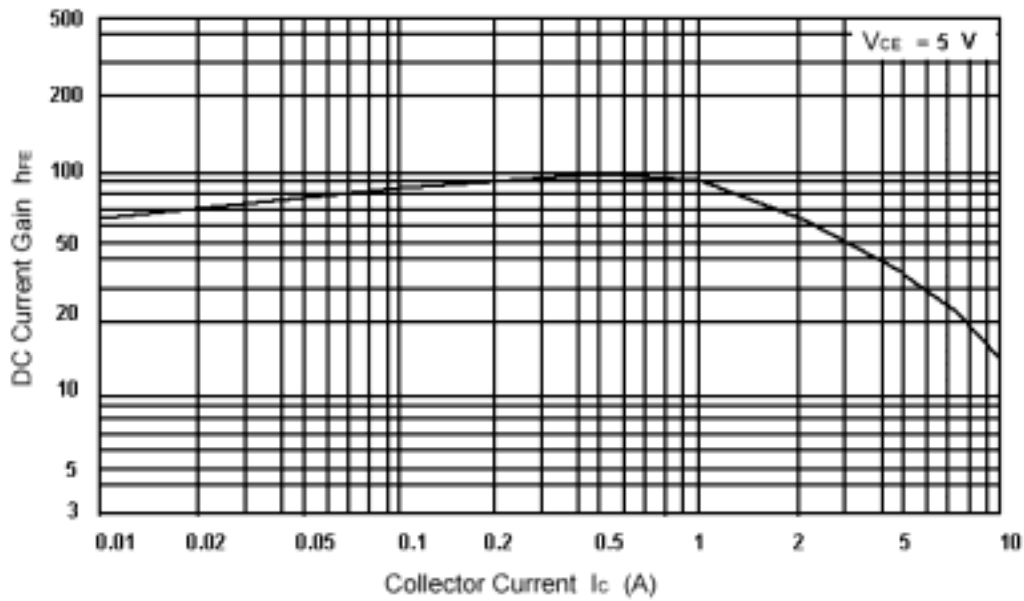


Fig.4 DC current Gain