

Silicon NPN Power Transistors

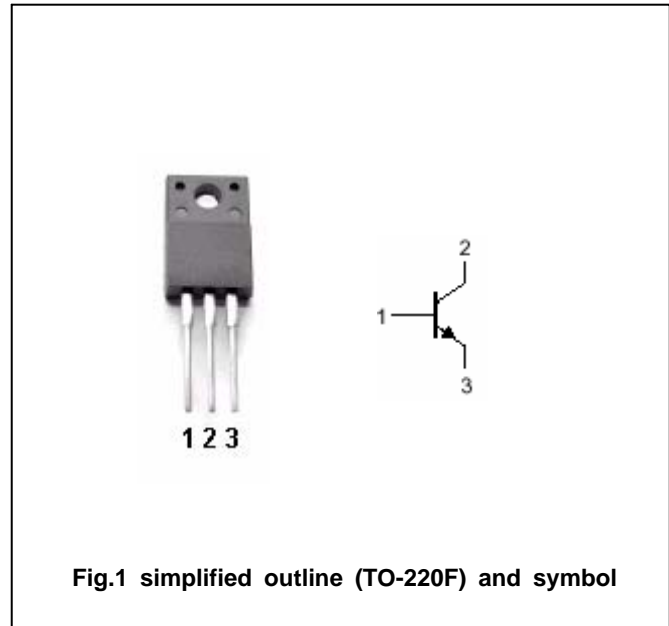
2SD2394

DESCRIPTION

- With TO-220F package
- Low collector saturation voltage
- Wide SOA (safe operating area)
- Complement to type 2SB1565

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	MAX	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	7	V
I_C	Collector current		3	A
I_{CM}	Collector current-peak		6	A
P_C	Collector dissipation	$T_a=25$	2	W
		$T_C=25$	25	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA ; I _B =0	60			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =50 μ A ; I _E =0	80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =50 μ A ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A ; I _B =0.2A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A ; I _B =0.2A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =60V ; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			10	μ A
h _{FE}	DC current gain	I _C =0.5A ; V _{CE} =5V	100		320	
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 ; f=5MHz		8		MHz

◆ h_{FE} Classifications

E	F
100-200	160-320

