

Silicon NPN Power Transistors

2SD1739

DESCRIPTION

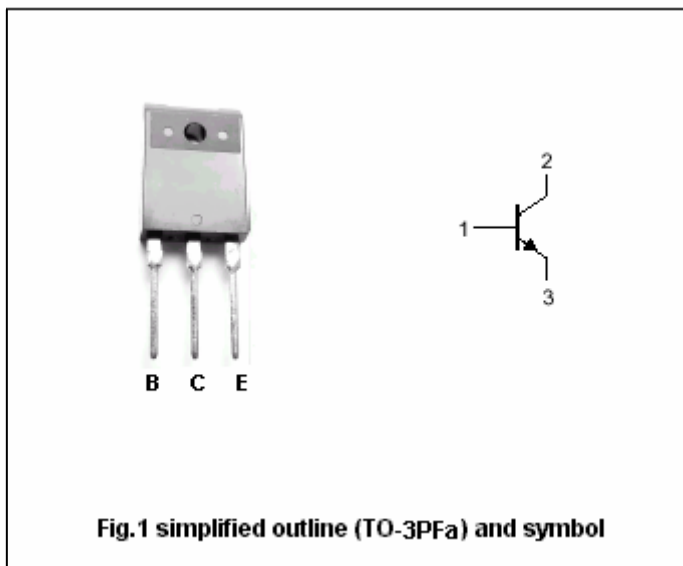
- With TO-3PFa package
- Wide area of safe operation
- High voltage, high speed

APPLICATIONS

- Horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		6	A
I_{CM}	Collector current-peak		18	A
I_B	Base current		2.5	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	100	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A ; I _B =1.2A			8.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =1.2A			1.5	V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
I _{CBO}	Collector cut-off current	V _{CB} =750V ; I _E =0			10	μ A
		V _{CB} =1500V ; I _E =0			1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			10	μ A
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	6		30	
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		2		MHz

Switching times

t _{stg}	Storage time	I _C =5A ; I _{B1} =1A I _{B2} =-2A ; V _{CC} =200V		1.5		μ s
t _f	Fall time			0.2		μ s

