

Silicon NPN Power Transistors

2SD1739

DESCRIPTION

www.datasheet4u.com

- 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

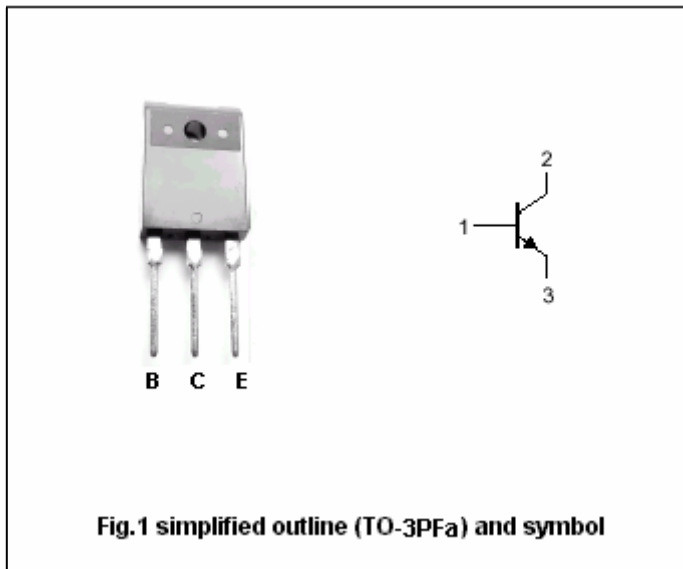


Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25°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°C	100	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

Silicon NPN Power Transistors

2SD1739

CHARACTERISTICS

www.datasheet4u.com

 $T_j=25^\circ\text{C}$ 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	μA
		$V_{CB}=1500V ; I_E=0$			1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			10	μA
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		μs
t_f	Fall time			0.2		μs

Silicon NPN Power Transistors

2SD1739

PACKAGE OUTLINE

www.datasheet4u.com

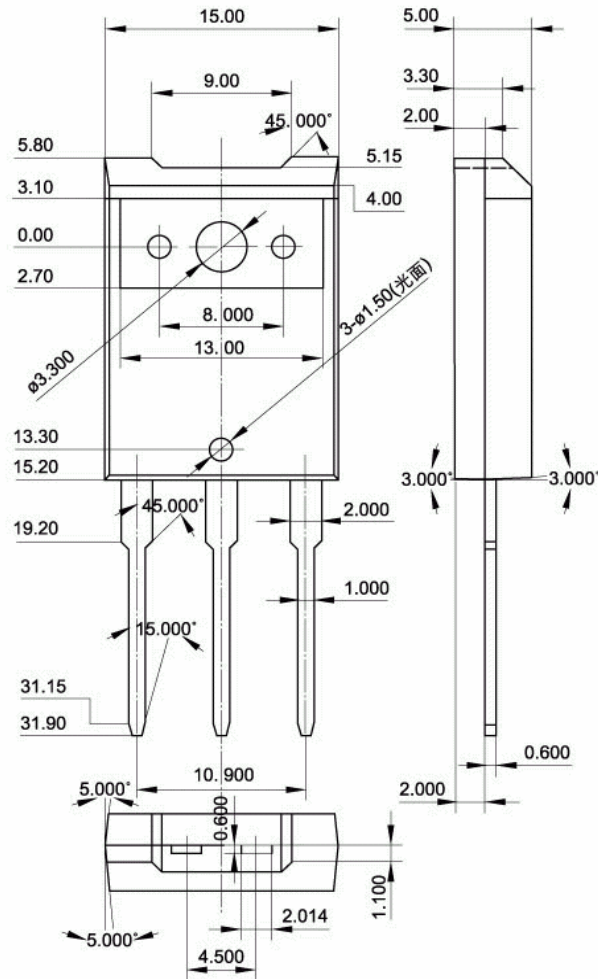


Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)