

Silicon NPN Power Transistors

2SD1548

DESCRIPTION

- With TO-3P(H)IS package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Color TV horizontal output applications
- Switching regulator output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

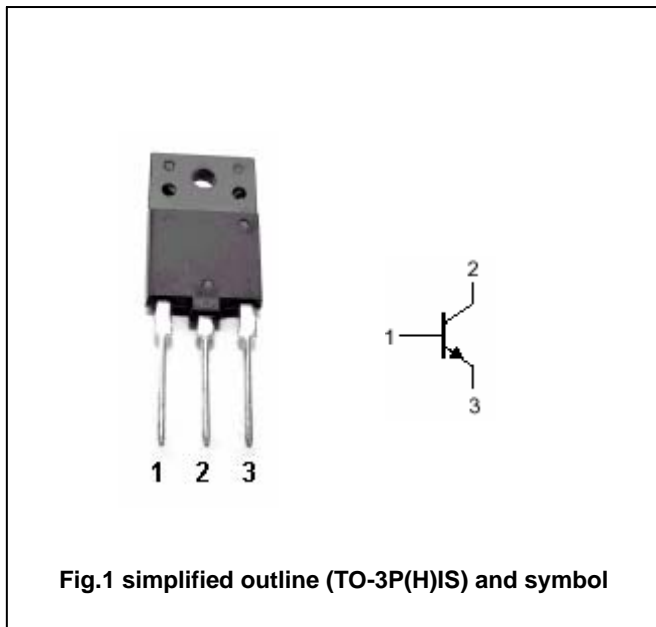


Fig.1 simplified outline (TO-3P(H)IS) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1400	V
V_{CEO}	Collector-emitter voltage	Open base	600	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		10	A
I_B	Base current		5	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	50	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 =8A ; I _B =2A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =8A ; I _B =2A			1.6	V
I _{CBO}	Collector cut-off current	V _{CB} =500V; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V	8			
f _T	Transition frequency	I _C =0.1A ; V _{CE} =10V		3		MHz
C _{OB}	Collector output capacitance	I _E =0 ; V _{CB} =10V; f=1MHz		165		pF
t _f	Fall time	I _{CP} =7A ; I _{B1(end)} =1.5A			1.0	μ s

