

Silicon NPN Power Transistors

2SD2348

DESCRIPTION

- With TO-3P(H)IS package
- Built-in damper diode
- High voltage ,high speed
- Low saturation voltage

APPLICATIONS

- Horizontal deflection output for color TV

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

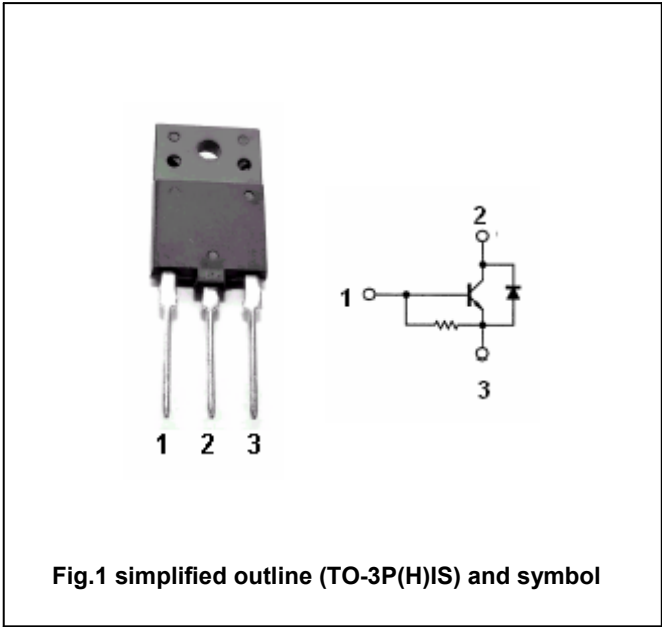


Fig.1 simplified outline (TO-3P(H)IS) and symbol

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	600	
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		±8	A
I_{CM}	Collector current-peak		±16	A
I_B	Base current		4	A
P_C	Collector power dissipation	$T_C=25^{\circ}C$	50	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=300mA$, $I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=6A$; $I_B=1.2A$			5.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=6A$; $I_B=1.2A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=1500V$; $I_E=0$			1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$	83		250	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	10			
h_{FE-2}	DC current gain	$I_C=6A$; $V_{CE}=5V$	6		9	
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=10V$	1	3		MHz
C_{OB}	Collector output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1MHz$		170		pF
V_F	Diode forward voltage	$I_F=6A$			1.8	V
t_s	Storage time	$I_{CP}=6A$; $I_{B1}=1.2A$; $f_H=15.75kHz$			12	μs
t_f	Fall time				0.7	μs

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