

Silicon NPN Power Transistors

2SD5702

DESCRIPTION

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

APPLICATIONS

- For color display horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

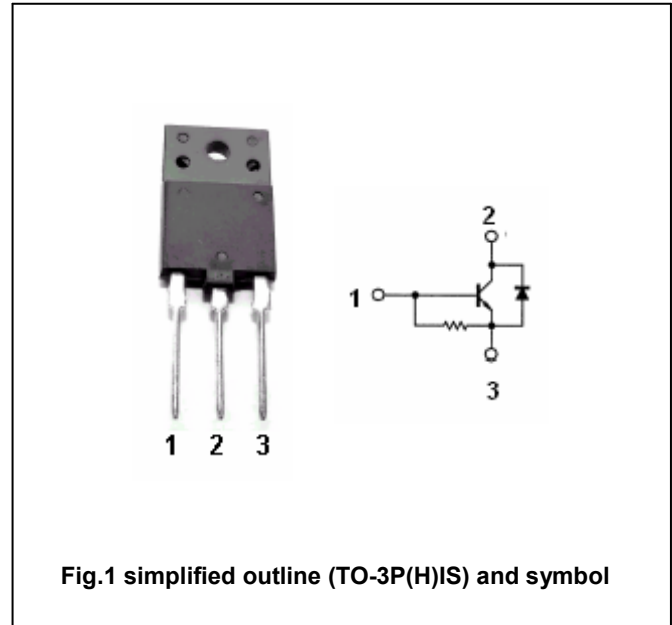


Fig.1 simplified outline (TO-3P(H)IS) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		6	A
I_{CM}	Collector current-peak		16	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	60	W
T_j	Junction temperature		150	°C
T_{stg}	Storage temperature		-55~150	°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 =4A ; I _B =0.8A		2.0	5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4A ; I _B =0.8A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =800V ; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V ; I _C =0	40		200	mA
h _{FE-1}	DC current gain	I _C =1A ; V _{CE} =5V	10		30	
h _{FE-2}	DC current gain	I _C =3A ; V _{CE} =5V	5		15	
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		3		MHz
V _F	Diode forward voltage	I _F =6A			2.0	V
t _f	Fall time	I _C =4A ; I _{B1} =0.8A ; I _{B2} =-1.6A V _{CC} =200V ; R _L =50Ω			0.4	μs

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PACKAGE OUTLINE

