

Silicon NPN Power Transistors

2SD2125

DESCRIPTION

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

APPLICATIONS

- Horizontal output applications for color TV
- Medium resolution display

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

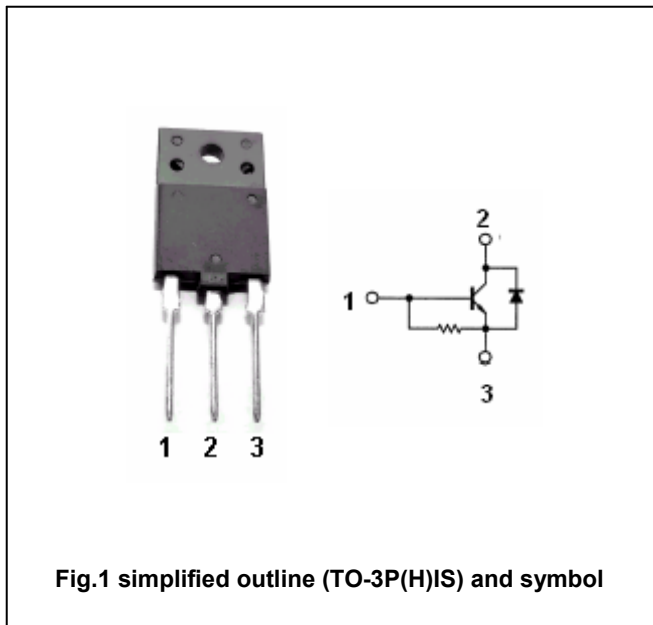


Fig.1 simplified outline (TO-3P(H)IS) and symbol

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	600	
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		6	A
I _{CM}	Collector current-peak		10	A
I _B	Base current		3	A
P _C	Collector power dissipation	T _C =25°C	50	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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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	$I_E=200mA, I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A; I_B=1A$		3.0	5.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A; I_B=1A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=500V; I_E=0$			10	μA
h_{FE-1}	DC current gain	$I_C=1A; V_{CE}=5V$	8		20	
h_{FE-2}	DC current gain	$I_C=5A; V_{CE}=5V$	5			
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
V_F	Diode forward voltage	$I_F=6A$			2.0	V
t_f	Fall time	$I_{CP}=5A; I_{BL}=1A; V_{CC}=100V$			0.5	μs

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PACKAGE OUTLINE

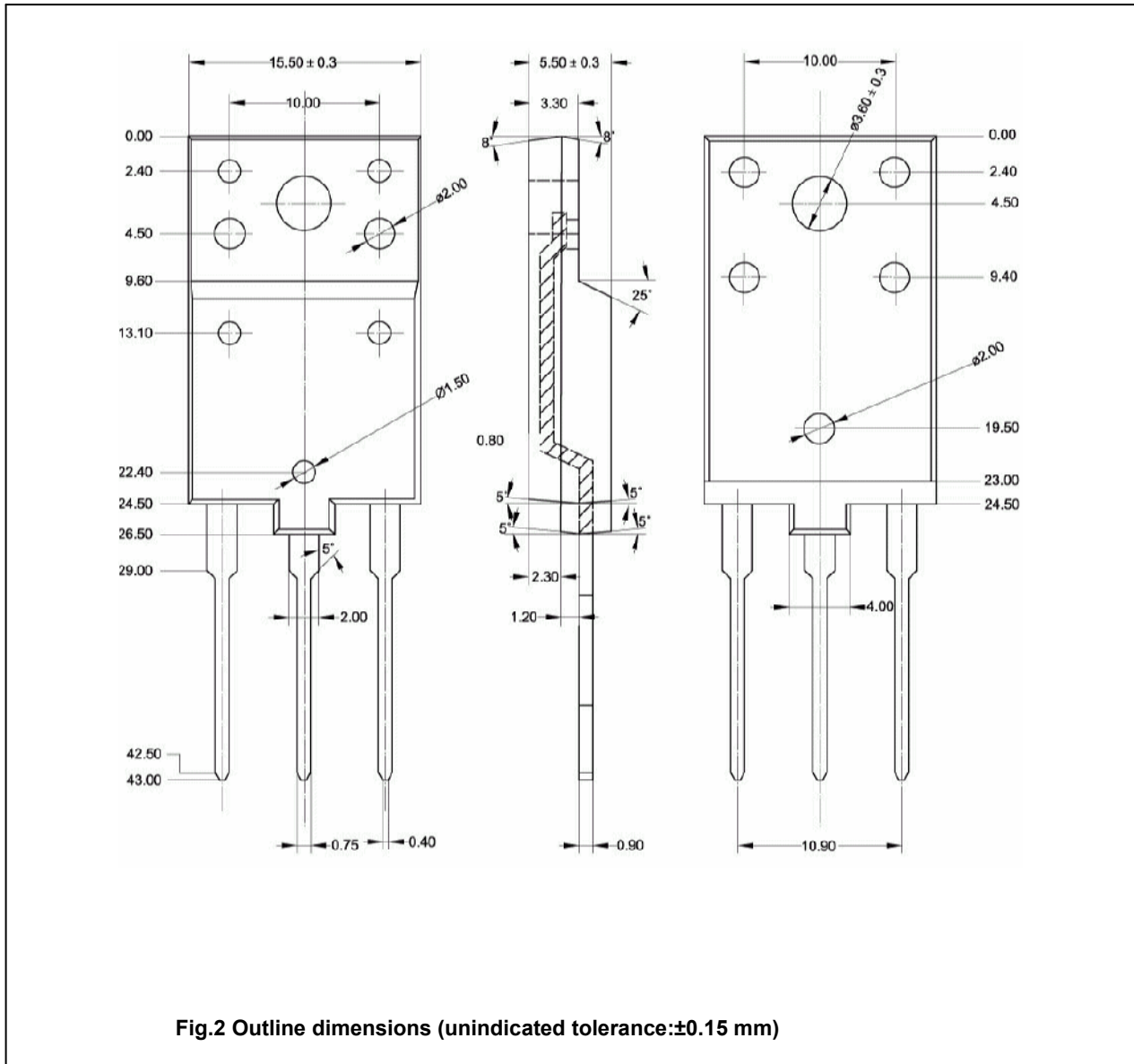


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)