

Silicon NPN Power Transistors

2SD1453

DESCRIPTION

- With TO-3PN package
- High voltage,high speed
- Built-in damper diode

APPLICATIONS

- For TV horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

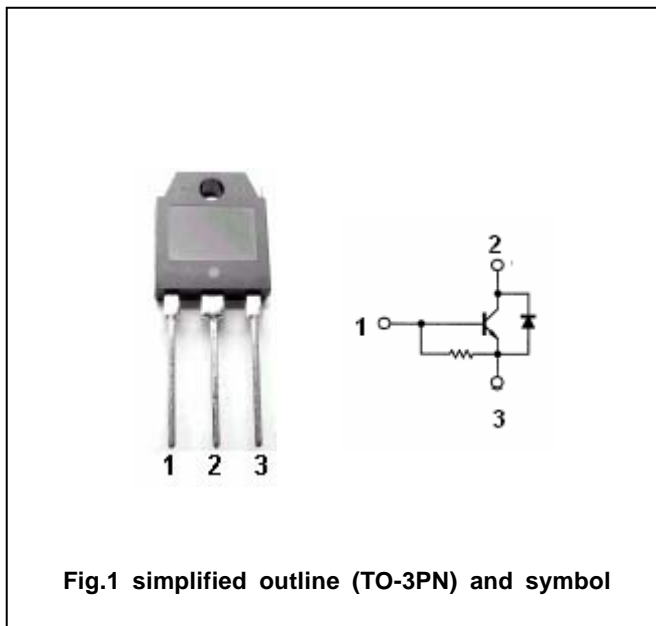


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25 )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	1500	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current (DC)		3	A
$I_{CM}$	Collector current-Peak		3.5	A
$P_C$	Collector power dissipation	$T_C=25$	50	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-45~150	

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =200mA; I <sub>C</sub> =0	6			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2.5A; I <sub>B</sub> =0.8A			5.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =2.5A; I <sub>B</sub> =0.8A			1.5	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =1500V; R <sub>BE</sub> =			0.5	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =0.3A ; V <sub>CE</sub> =5V	6			
V <sub>F</sub>	Diode forward voltage	I <sub>F</sub> =3A			2.2	V
t <sub>f</sub>	Fall time	I <sub>CP</sub> =2.75A; I <sub>B1</sub> =0.6A; I <sub>B2</sub> -1.3A			0.8	μs

固电半导体  
INCHANGE SEMICONDUCTOR

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PACKAGE OUTLINE

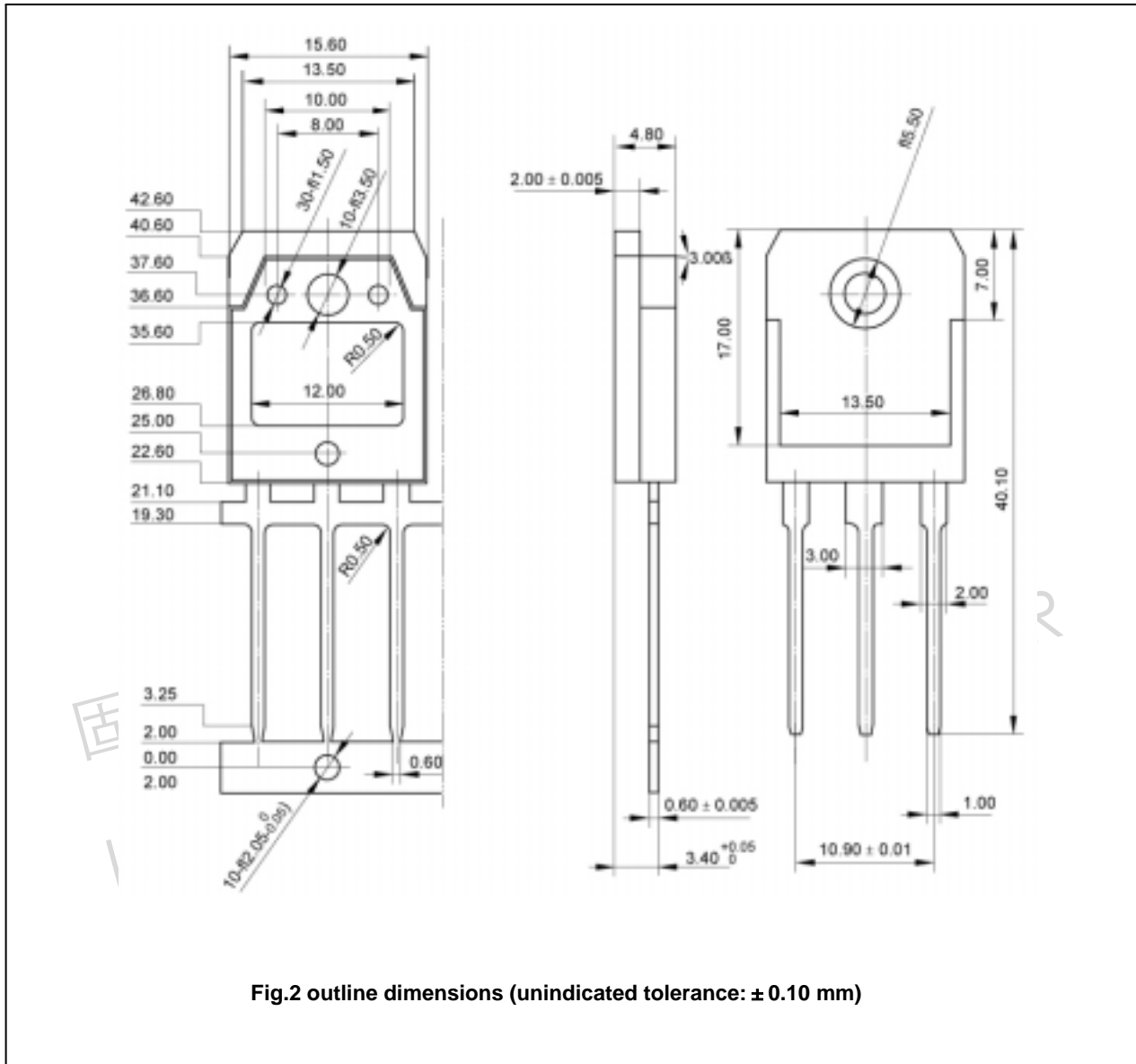


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10$  mm)