

Silicon NPN Power Transistors

2SD1397

DESCRIPTION

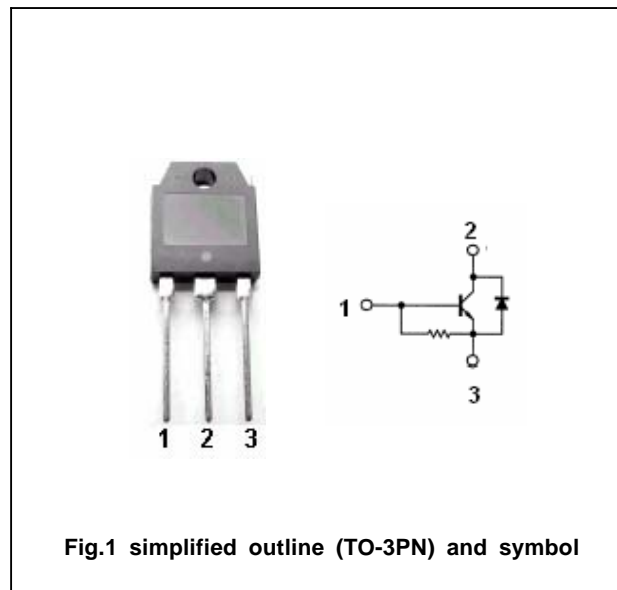
- With TO-3PN package
- Built-in damper diode
- High voltage ,high reliability
- High speed switching

APPLICATIONS

- Color TV horizontal output applications

PINNING

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



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	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		3.5	A
I_{CM}	Collector current-peak		10	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	80	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

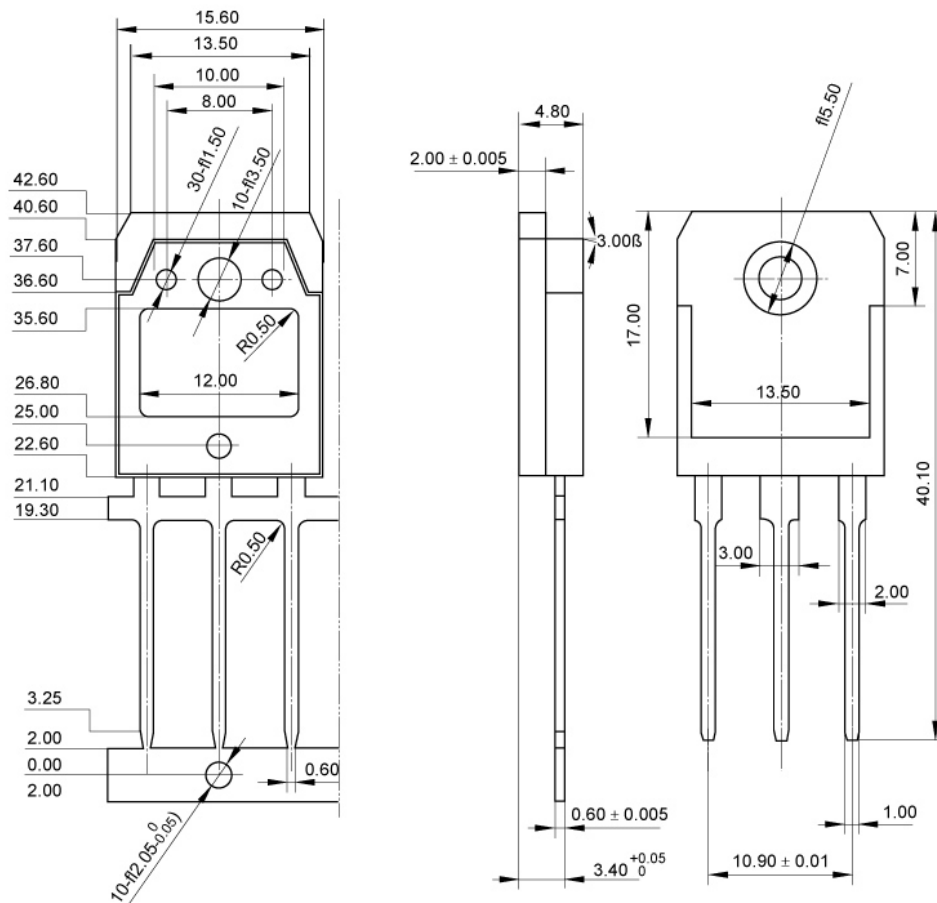
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector- emitter sustaining voltage	$I_C=100mA$; $R_{BE}=\infty$	800			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=5mA$; $I_E=0$	1500			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=200mA$; $I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=2.5A$; $I_B=0.8A$			8.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=2.5A$; $I_B=0.8A$			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		130	mA
h_{FE}	DC current gain	$I_C=0.5A$; $V_{CE}=5V$	8			
f_T	Transition frequency	$I_C=0.5A$; $V_{CE}=10V$		3		MHz
V_F	Diode forward voltage	$I_{EC}=3.5A$			2.0	V

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)