

Silicon NPN Power Transistors**2SD1243****DESCRIPTION**

- With TO-3PN package
- Wide area of safe operation

APPLICATIONS

- Audio frequency power amplifier
- High frequency power amplifier

PINNING

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

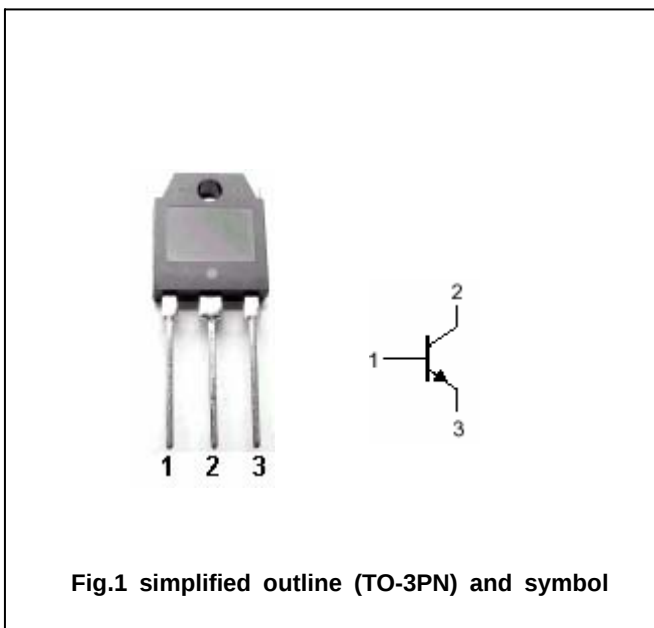


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	60	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	100	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA ; I_B=0$	60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA ; I_E=0$	60			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A ; I_B=0.5A$			1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A ; I_B=0.5A$			2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=60V ; I_E=0$			50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			50	μA
h_{FE}	DC current gain	$I_C=3A ; V_{CE}=3V$	50			

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PACKAGE OUTLINE

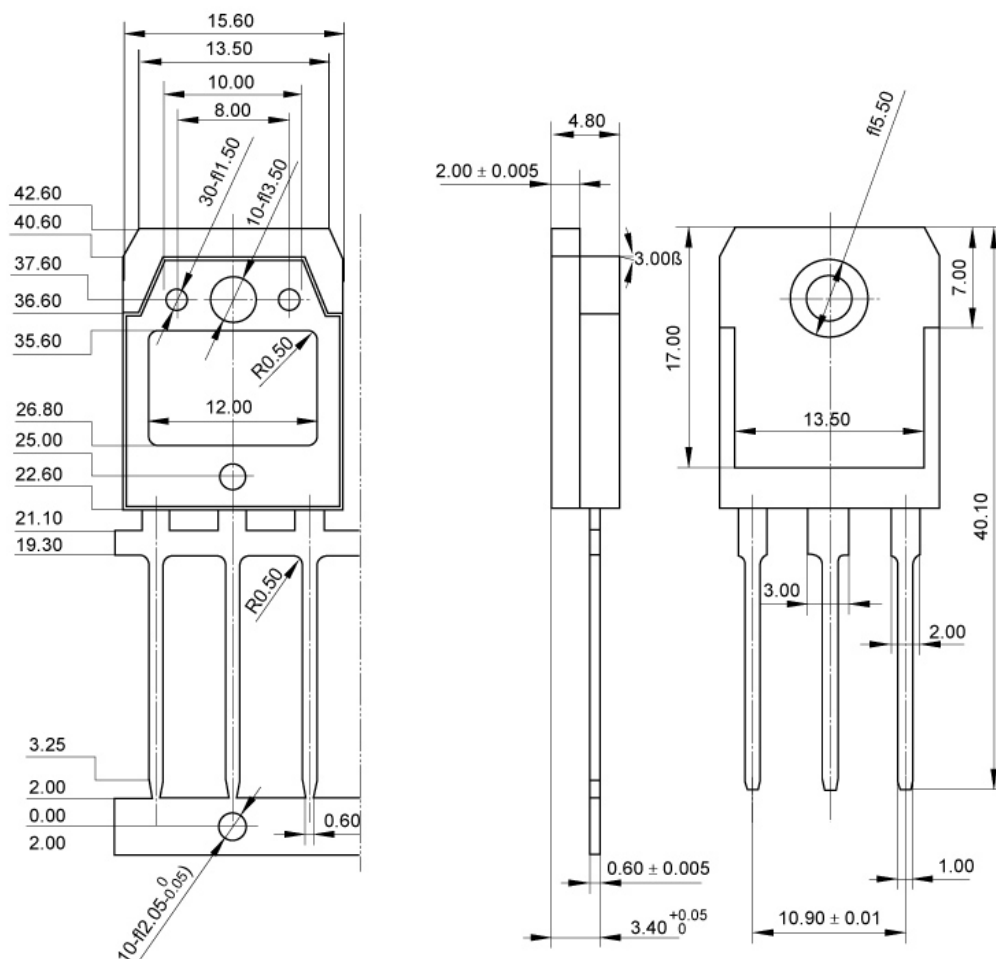


Fig.2 outline dimensions