

## Silicon NPN Power Transistors

2SC2563

## DESCRIPTION

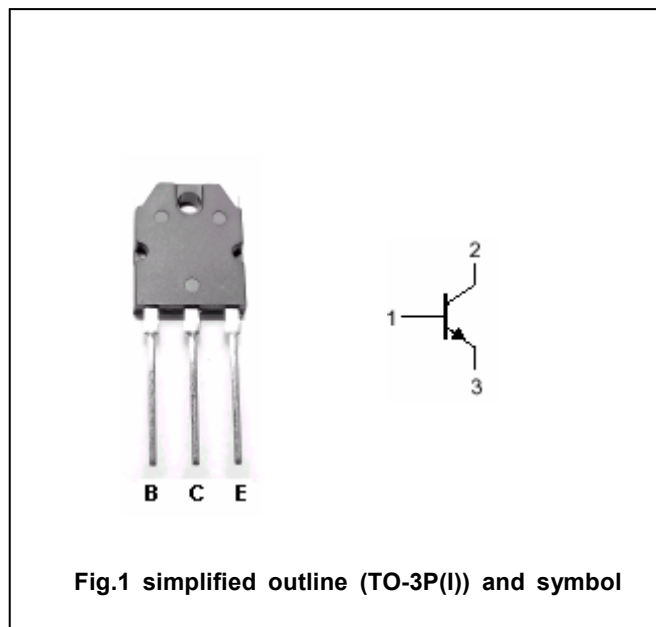
- With TO-3P(I) package
- High power dissipation

## APPLICATIONS

- For audio power amplifier and general purpose applications

## PINNING

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

ABSOLUTE MAXIMUM RATINGS( $T_C=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	120	V
$V_{CEO}$	Collector-emitter voltage	Open base	120	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		8	A
$P_T$	Total power dissipation	$T_C=25^\circ\text{C}$	80	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

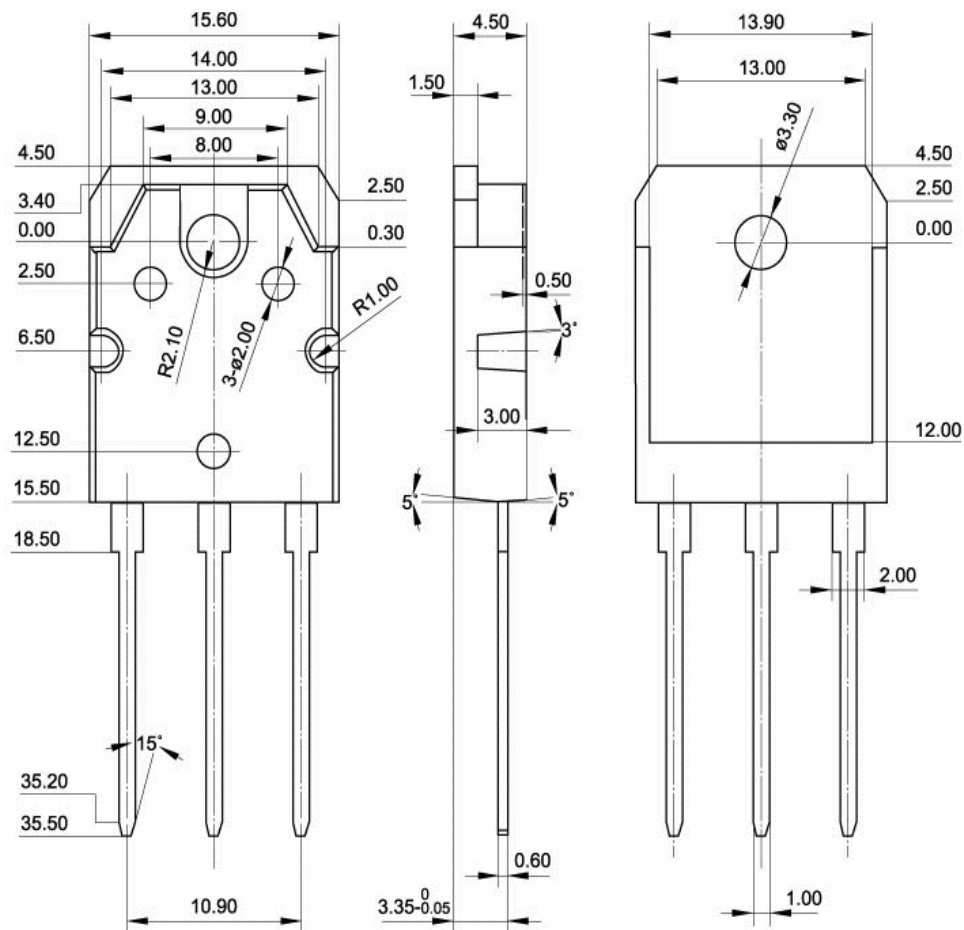
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=25mA, I_B=0$	120			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA, I_C=0$	5			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=4A; I_B=0.4A$			2.0	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=120V; I_E=0$			50	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=5V; I_C=0$			50	$\mu A$
$h_{FE-1}$	DC current gain	$I_C=1A; V_{CE}=5V$	55		160	
$h_{FE-2}$	DC current gain	$I_C=4A; V_{CE}=5V$	35			
$f_T$	Transition frequency	$I_C=1A; V_{CE}=5V$		90		MHz

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## PACKAGE OUTLINE

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