

Silicon PNP Power Transistors

TIP2955

DESCRIPTION

- With TO-3PN package
- Complement to type TIP3055
- 90 W at 25°C case temperature
- 15 A continuous collector current

APPLICATIONS

- Designed for general-purpose switching and amplifier applications.

PINNING

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

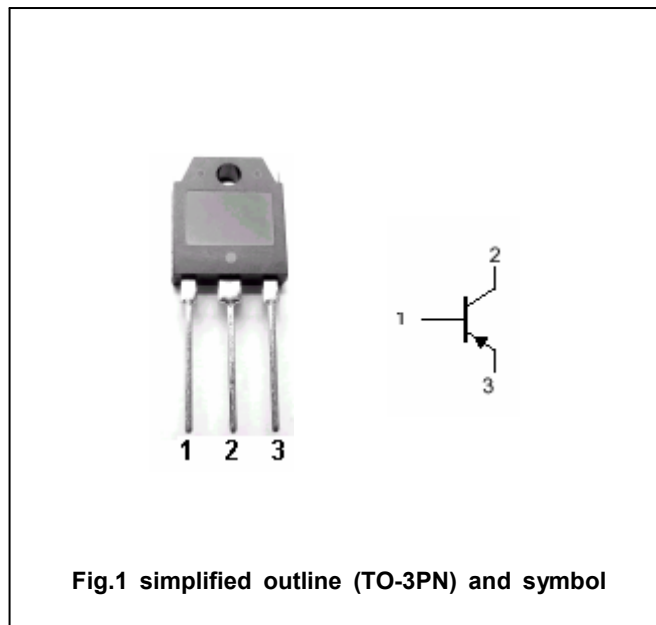


Fig.1 simplified outline (TO-3PN) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-15	A
I_B	Base current		-7	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	90	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.39	$^\circ\text{C}/\text{W}$

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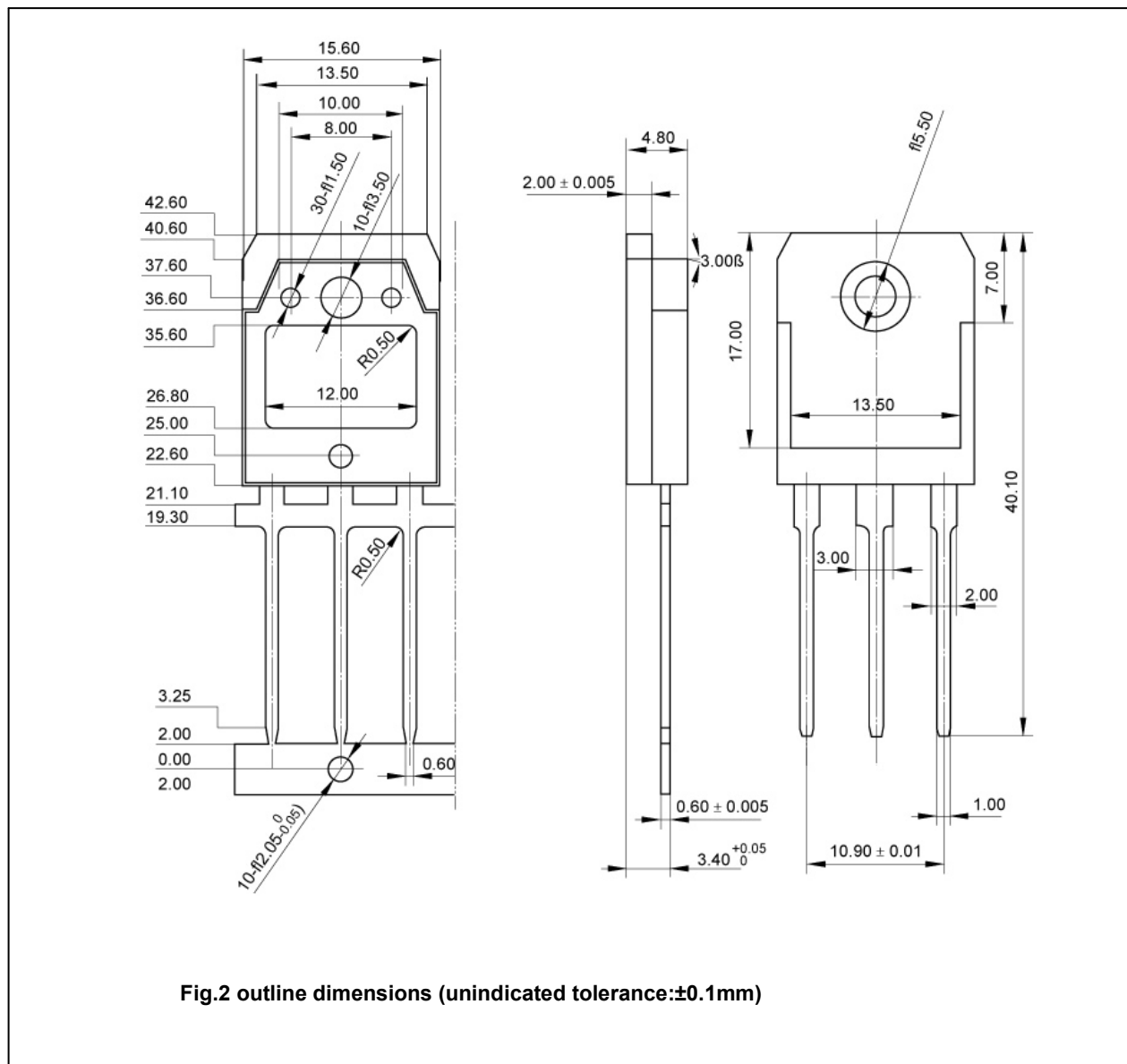
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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=-30mA$; $I_B=0$	-60			V
$V_{CE(sat)-1}$	Collector-emitter saturation voltage	$I_C=-4A$; $I_B=-0.4A$			-1.1	V
$V_{CE(sat)-2}$	Collector-emitter saturation voltage	$I_C=-10A$; $I_B=-3.3A$			-3.0	V
V_{BE}	Base-emitter on voltage	$I_C=-4A$; $V_{CE}=-4V$			-1.5	V
I_{CEO}	Collector cut-off current	$V_{CE}=-30V$; $I_B=0$			-0.7	mA
I_{CER}	Collector cut-off current	$V_{CE}=-70Vdc$; $R_{BE}=100\Omega$			-1.0	mA
I_{CEV}	Collector cut-off current	$V_{CE}=-100Vdc$, $V_{BE(off)}=-1.5Vdc$			-5.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=-7V$; $I_C=0$			-5.0	mA
h_{FE-1}	DC current gain	$I_C=-4A$; $V_{CE}=-4V$	20		70	
h_{FE-2}	DC current gain	$I_C=-10A$; $V_{CE}=-4V$	5.0			
$I_{S/b}$	Second breakdown collector current with base forward biased	$V_{CE}=-30Vdc$, $t=1.0s$, Nonrepetitive	3.0			A
f_T	Transition frequency	$I_C=-0.5A$; $V_{CE}=-10V$	2.5			MHz

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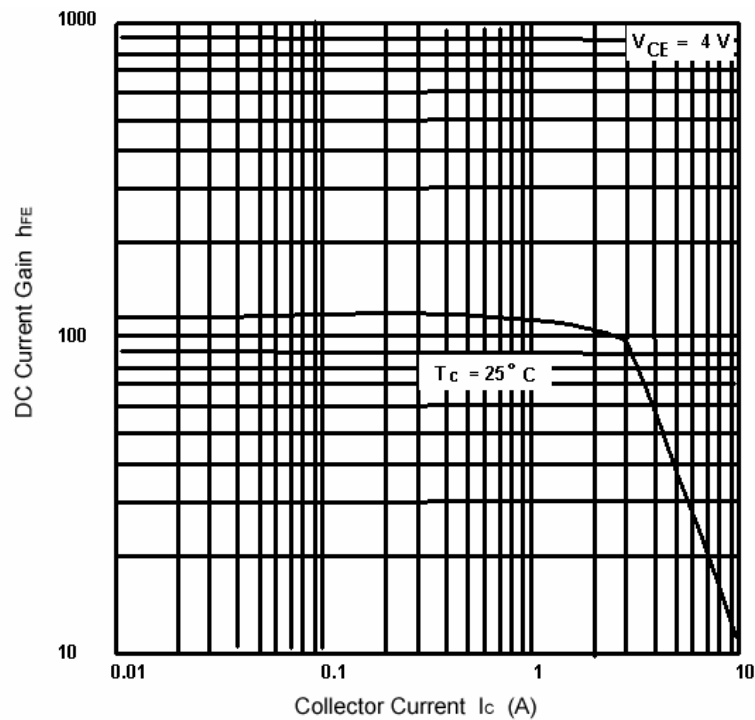


Fig.3 DC current Gain

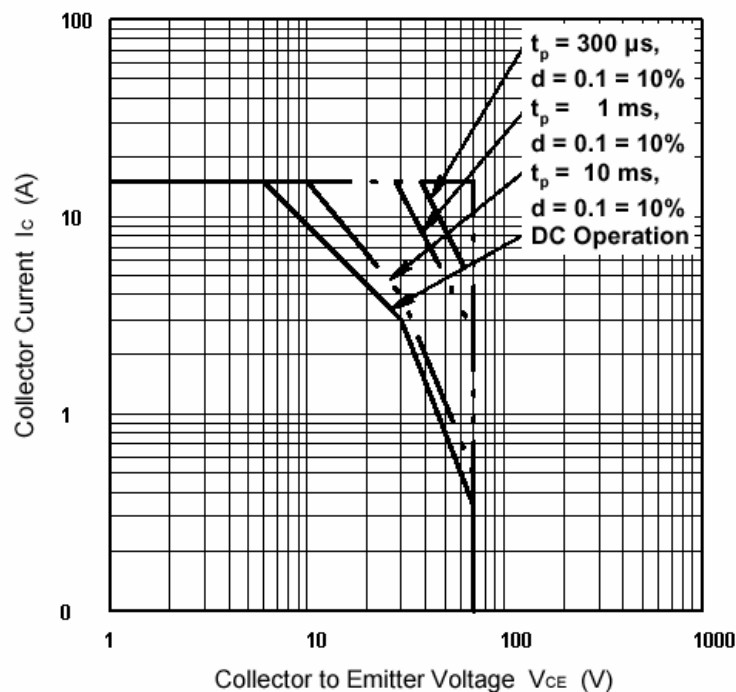


Fig.4 Safe Operating Area