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.

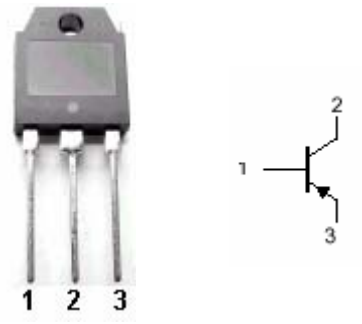

Fig.1 simplified outline (TO-3PN) and symbol

PINNING

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

Absolute maximum ratings(Ta=℃)

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℃	90	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

Tj=25℃ 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
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=-4A ;I_B=-0.4A			-1.1	V
$V_{CEsat-2}$	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}=100Ohm			-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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PACKAGE OUTLINE

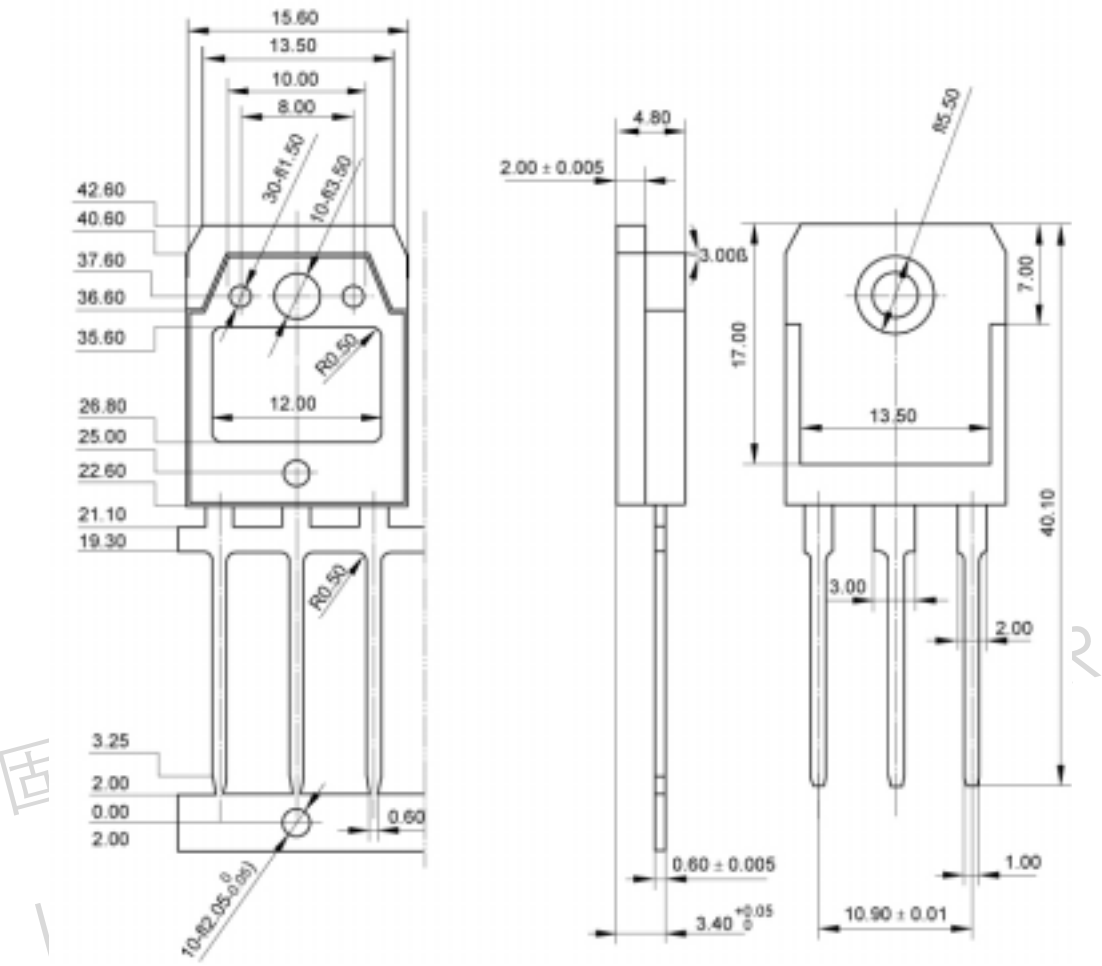

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)

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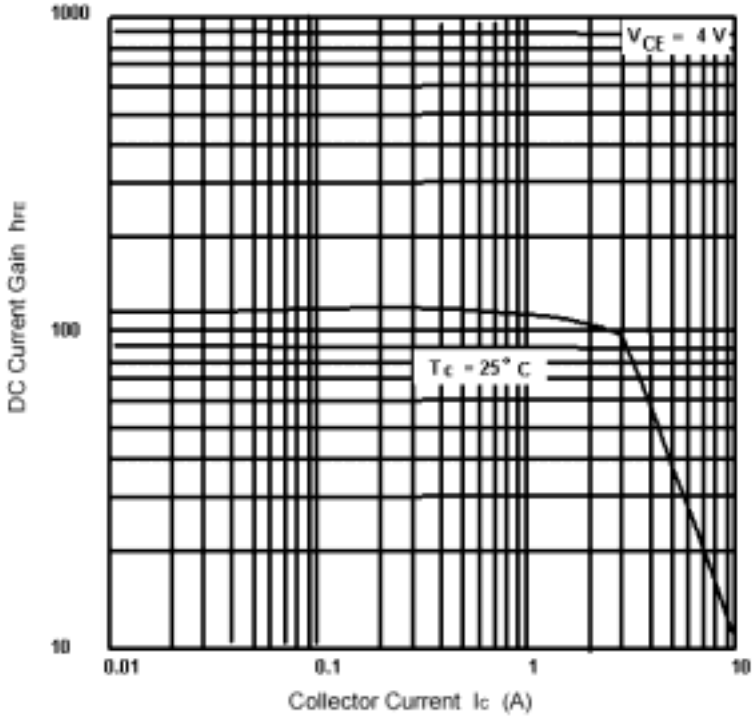

Fig.3 DC current Gain

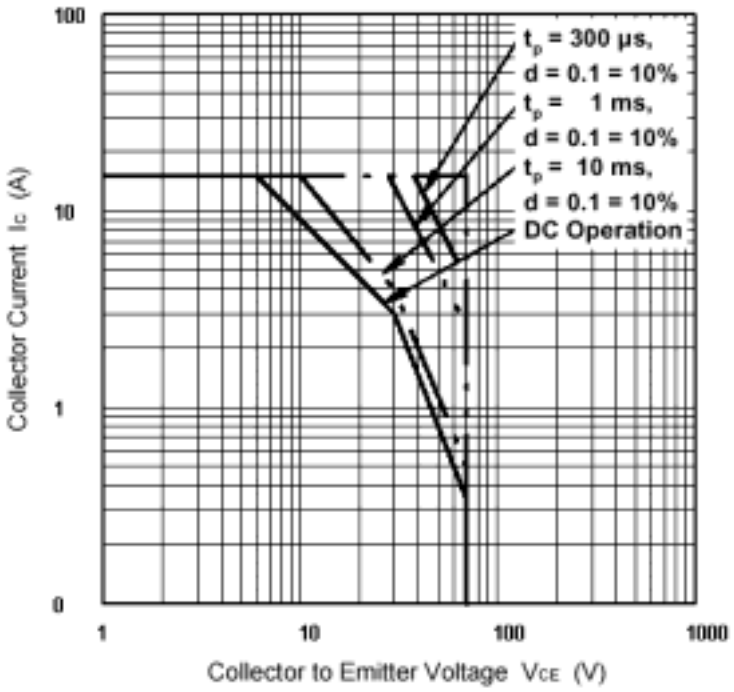

Fig.4 Safe Operating Area