

Silicon NPN Power Transistors

2SC2792

DESCRIPTION

- With TO-3P(I) package
- High breakdown voltage
- Excellent switching times

APPLICATIONS

- Switching regulator and high voltage
- Switching applications
- High speed DC-DC converter applications

PINNING

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

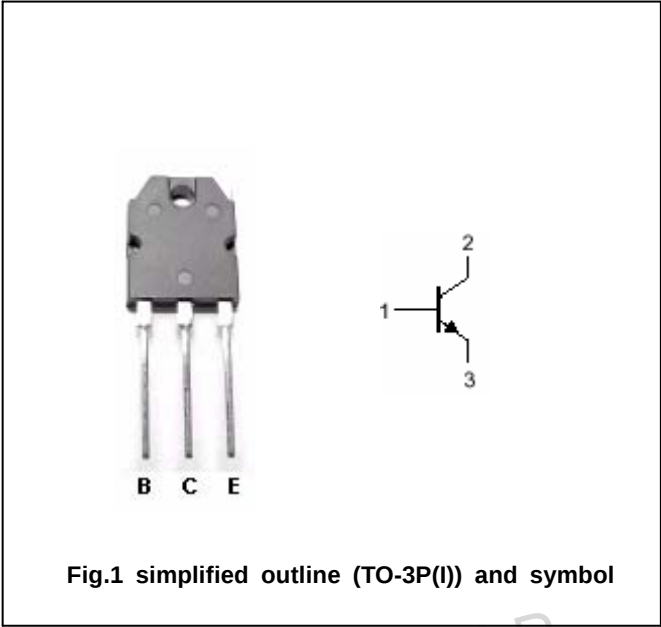


Fig.1 simplified outline (TO-3P(I)) and symbol

Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	850	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current-DC		2	A
I_{CM}	Collector current-peak		4	A
I_B	Base current		1	A
P_T	Total power dissipation	$T_C=25$	80	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10mA, I_B=0$	800			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA, I_E=0$	850			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=500mA; I_B=50mA$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=500mA; I_B=50mA$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=800V; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V; I_C=0$			1.0	mA
h_{FE}	DC current gain	$I_C=0.5A; V_{CE}=5V$	10			

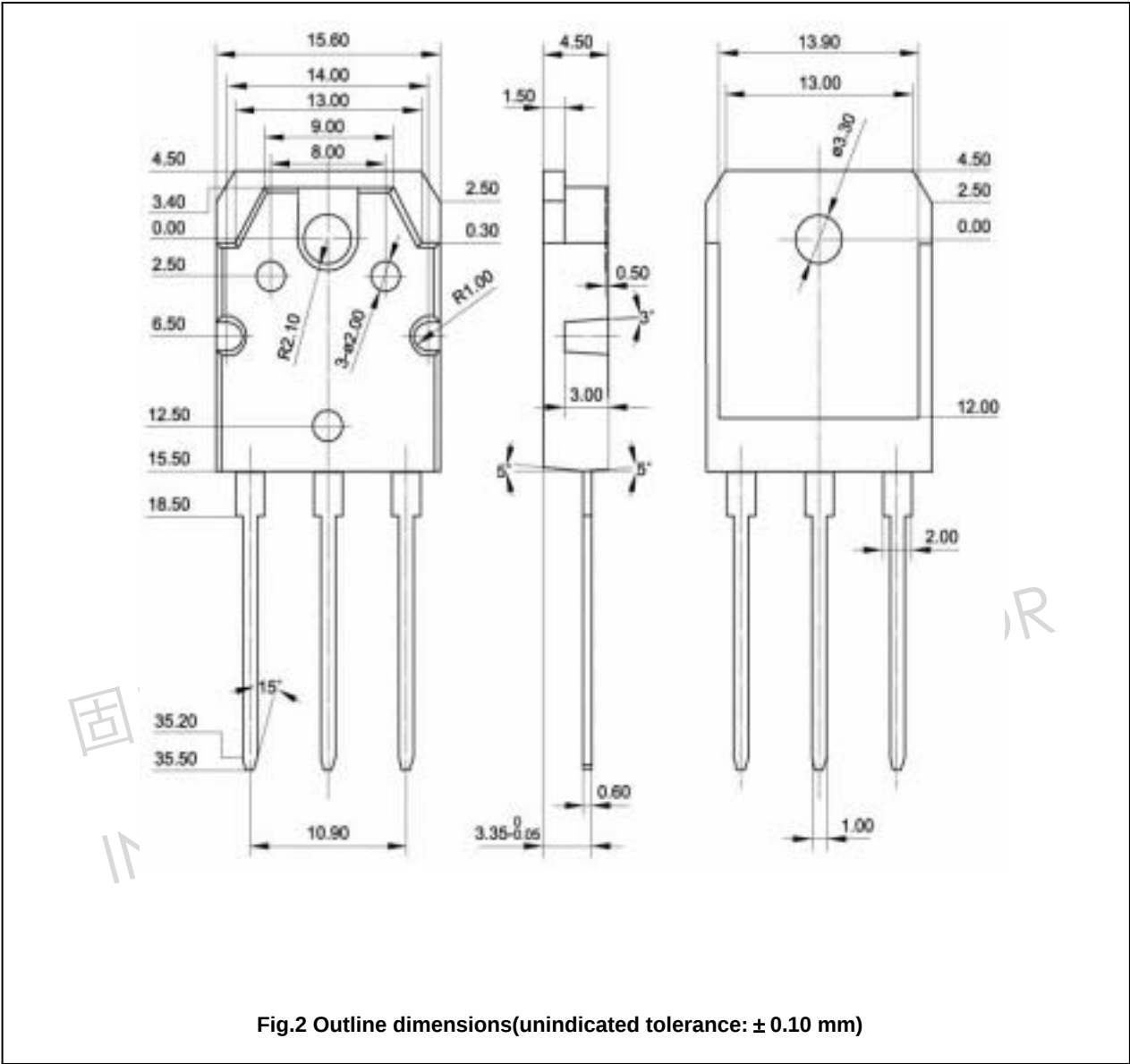
Switching times

t_r	Rise time	$V_{CC}=400V; 2I_{B1}=-I_{B2}=0.1A;$ $R_L=800\Omega$			1.0	μs
t_{stg}	Storage time				4.0	μs
t_f	Fall time				1.0	μs

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PACKAGE OUTLINE



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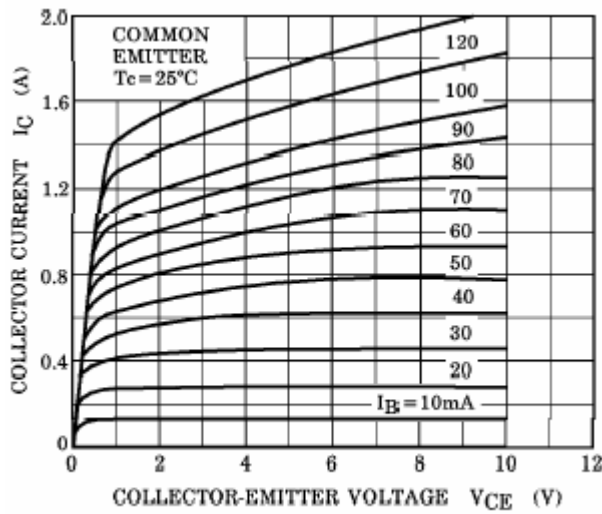


Fig.3 Static Characteristic

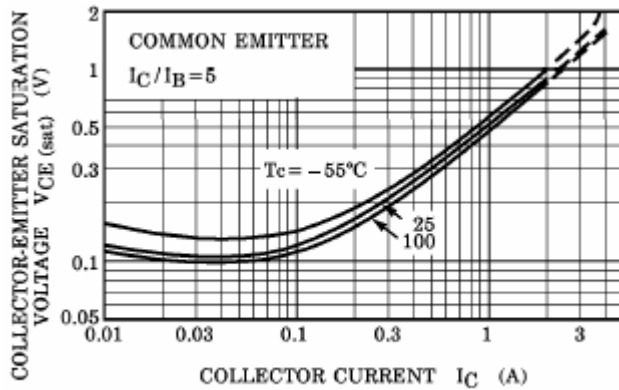


Fig.5 Collector-Emitter Saturation Voltage

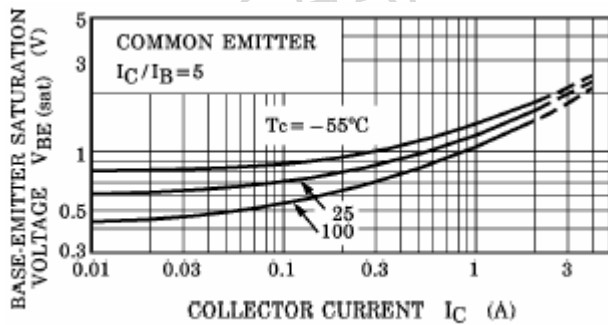


Fig.6 Base-Emitter Saturation Voltage

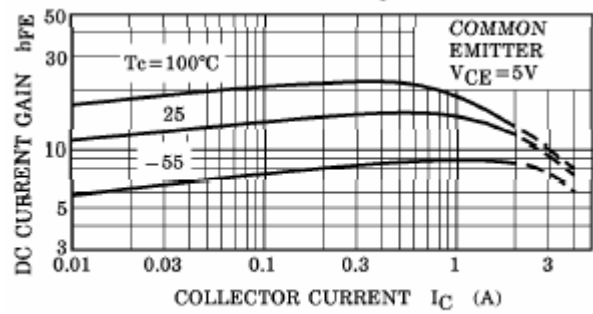


Fig.4 DC current Gain

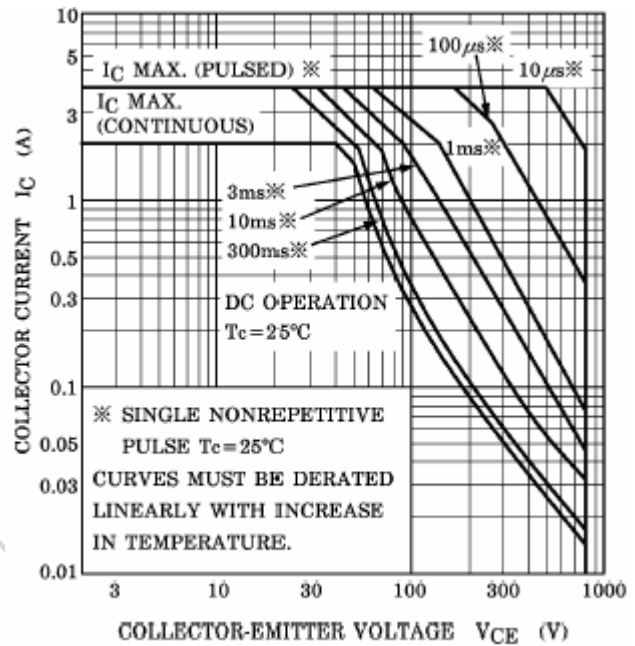


Fig.7 Safe Operating Area