

Silicon NPN Power Transistors

2SC3636

DESCRIPTION

- With TO-3PN package
- High voltage ,high speed
- High reliability

APPLICATIONS

- Ultrahigh-definition CRT display horizontal deflection output applications

PINNING

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

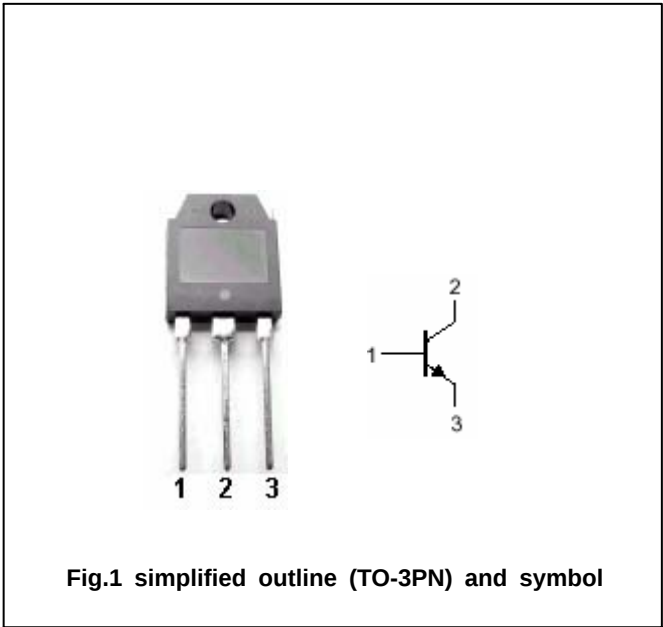


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	900	V
V_{CEO}	Collector-emitter voltage	Open base	500	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		7	A
I_{CM}	Collector current-peak		14	A
P_C	Collector 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
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=100mA$; $I_B=0$	500			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			2.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=500V$; $I_E=0$			10	μA
I_{CES}	Collector cut-off current	$V_{CE}=900V$; $R_{BE}=0$			0.5	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			1.0	mA
h_{FE}	DC current gain	$I_C=0.8A$; $V_{CE}=5V$	8			

Switching times

t_s	Storage time	$V_{CC}=200V$; $I_C=4A$; $I_{B1}=0.8A$; $I_{B2}=-1.6A$			3.0	μs
t_f	Fall time			0.1	0.2	μs

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PACKAGE OUTLINE

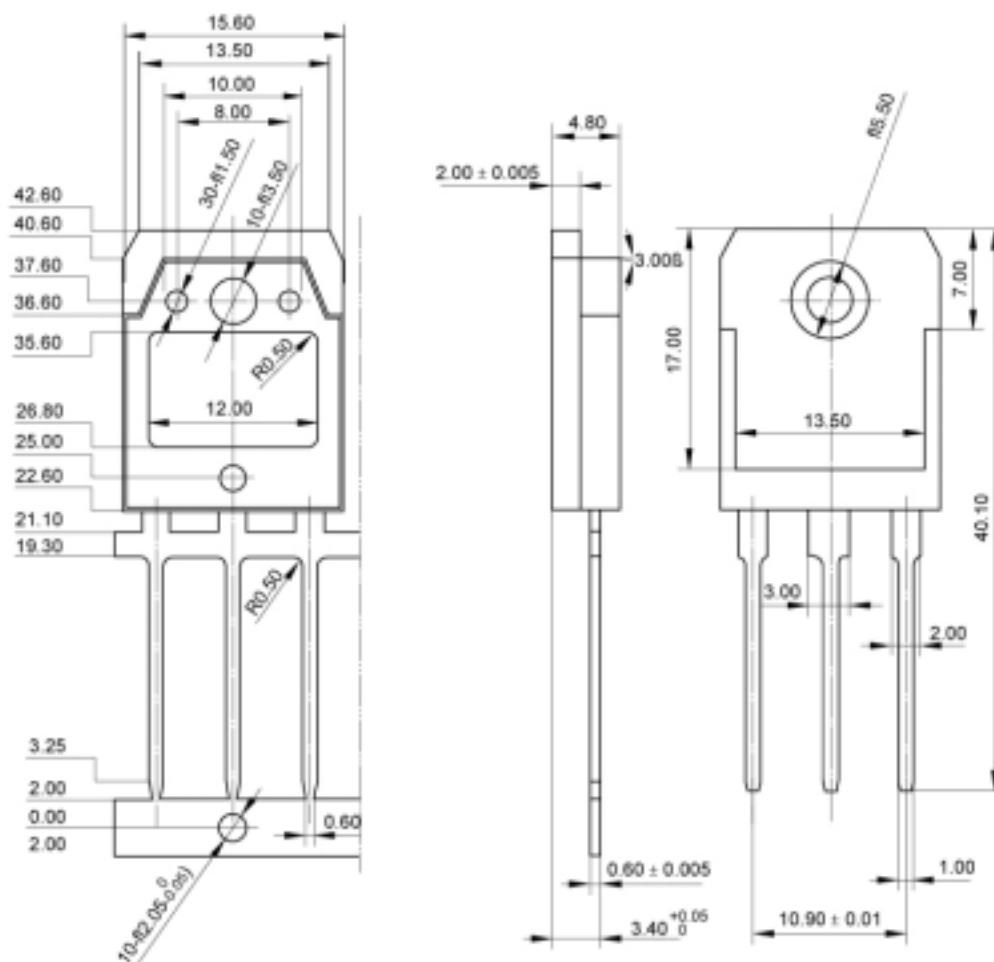


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)

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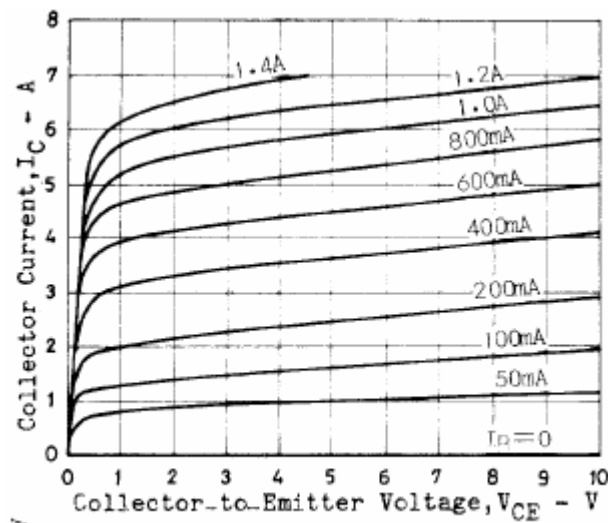


Fig.3 Static Characteristic

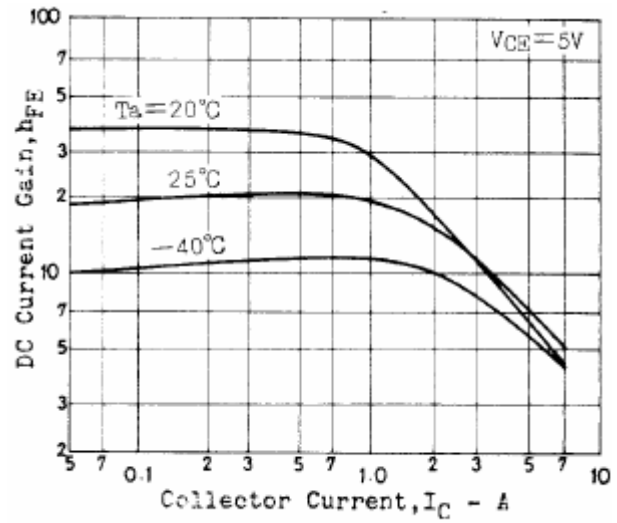


Fig.4 DC current Gain

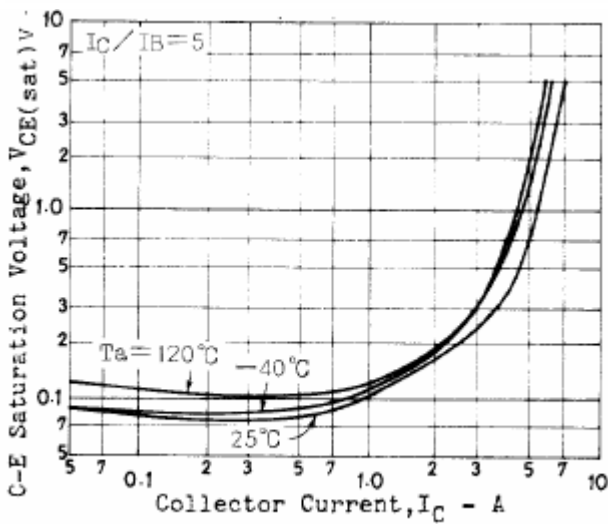


Fig.5 Collector-Emitter Saturation Voltage

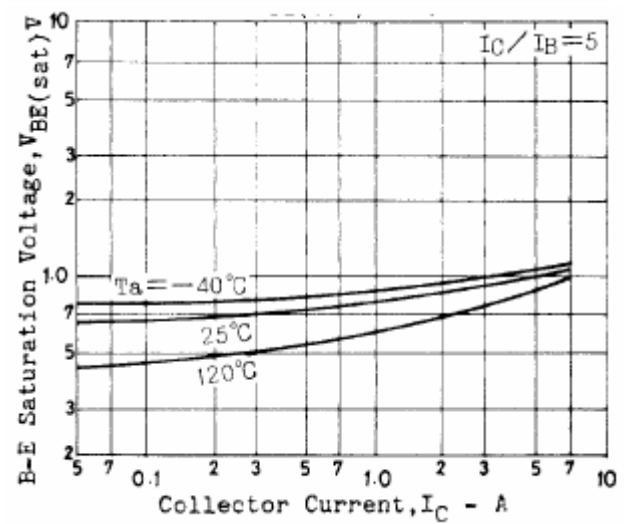


Fig.6 Base-Emitter Saturation Voltage

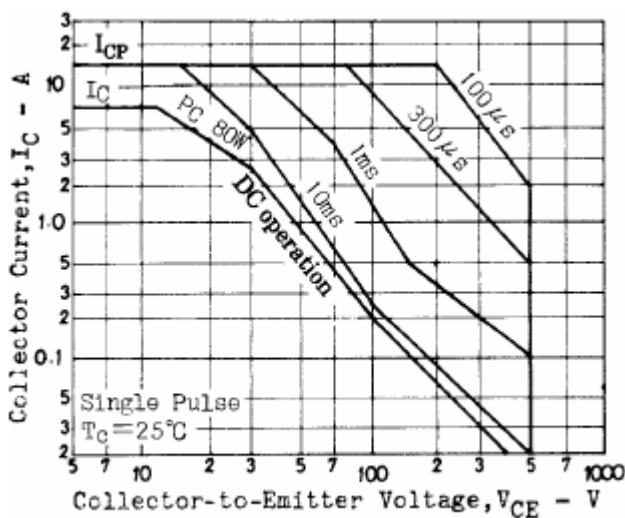


Fig.7 Safe Operating Area