

Silicon NPN Power Transistors

2SC4466

DESCRIPTION

- With TO-3PN package
- Complement to type 2SA1693

APPLICATIONS

- Audio and general purpose

PINNING

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

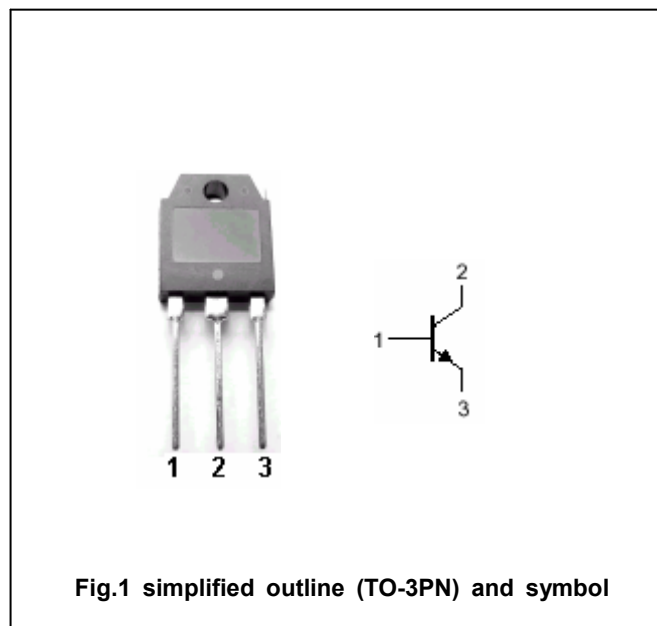


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		6	A
I_B	Base current		3	A
P_C	Collector power dissipation	$T_C = 25\square$	60	W
T_j	Junction temperature		150	\square
T_{stg}	Storage temperature		-55~150	\square

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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	$I_C=50mA; I_B=0$	80			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=2A; I_B=0.2A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=120V; I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V; I_C=0$			10	μA
h_{FE}	DC current gain	$I_C=2A; V_{CE}=4V$	50		180	
C_{OB}	Output capacitance	$I_E=0; V_{CB}=10V, f=1MHz$		110		pF
f_T	Transition frequency	$I_C=-0.5A; V_{CE}=12V$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C=3A; R_L=10\Omega$ $I_{B1}=-I_{B2}=0.3A$ $V_{CC}=30V$		0.16		μs
t_s	Storage time			2.60		μs
t_f	Fall time			0.34		μs

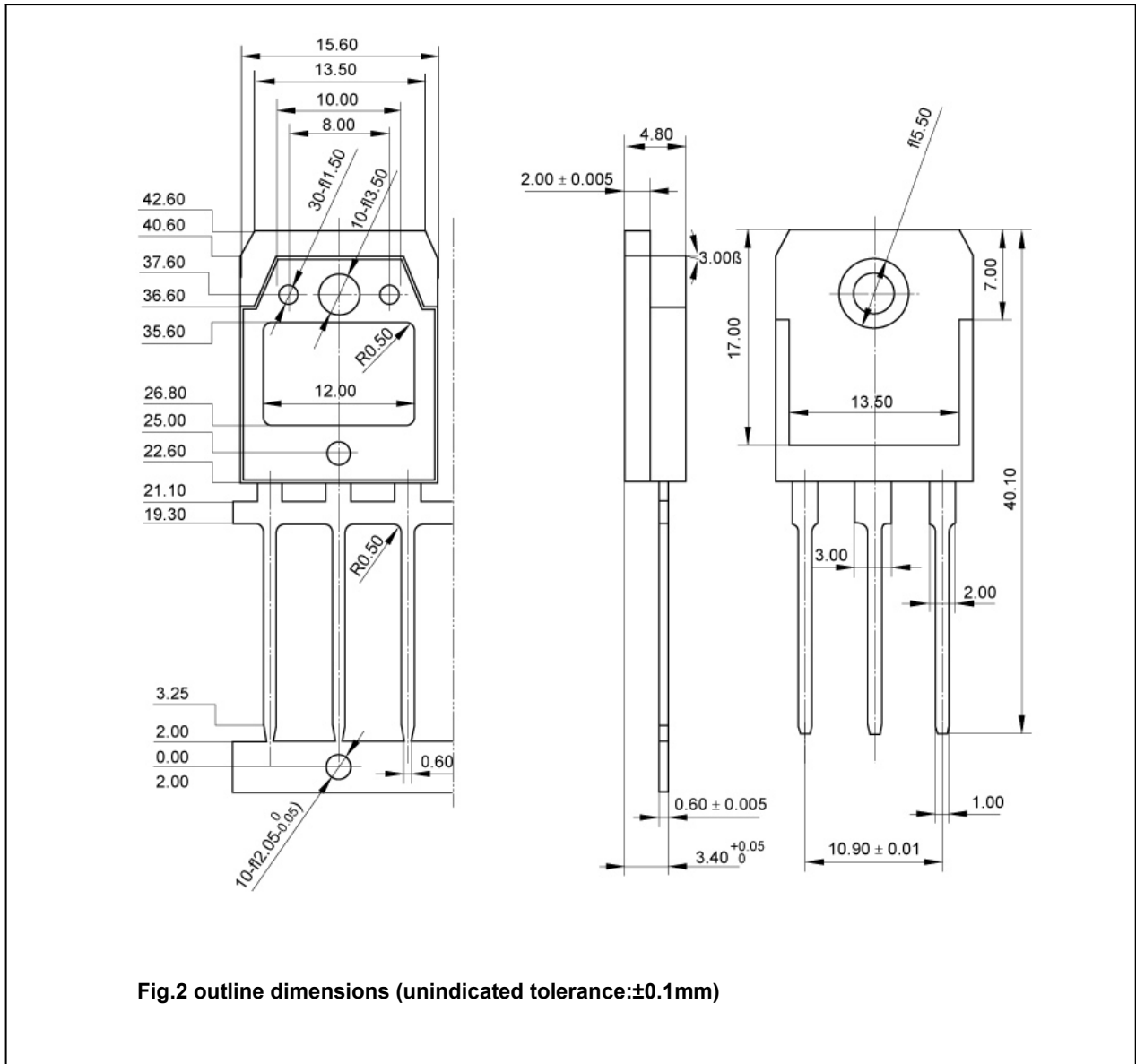
◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180

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PACKAGE OUTLINE



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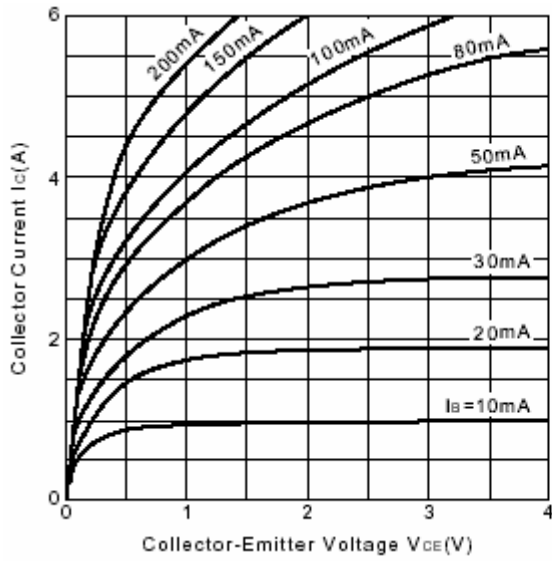


Fig.3 Static Characteristic

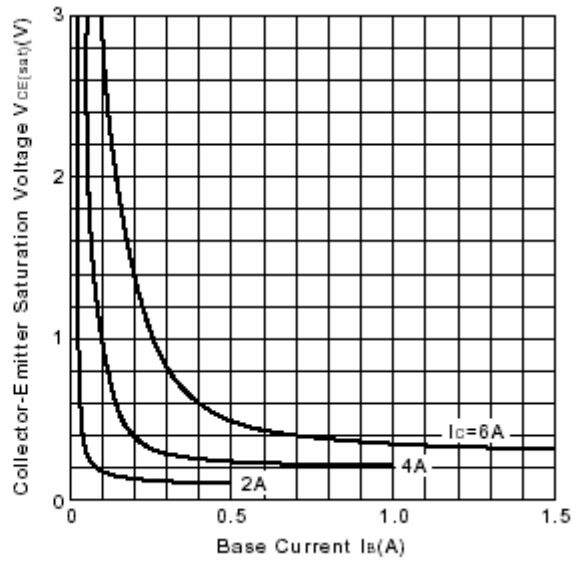


Fig.4 $V_{ce(sat)}-I_b$ Characteristics

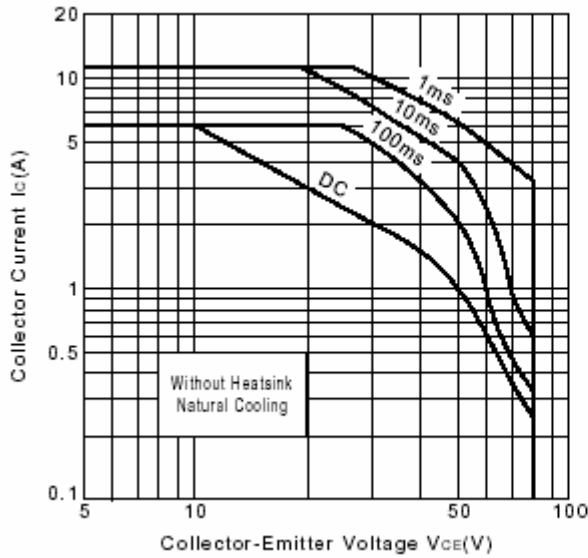


Fig.5 Safe Operating Area

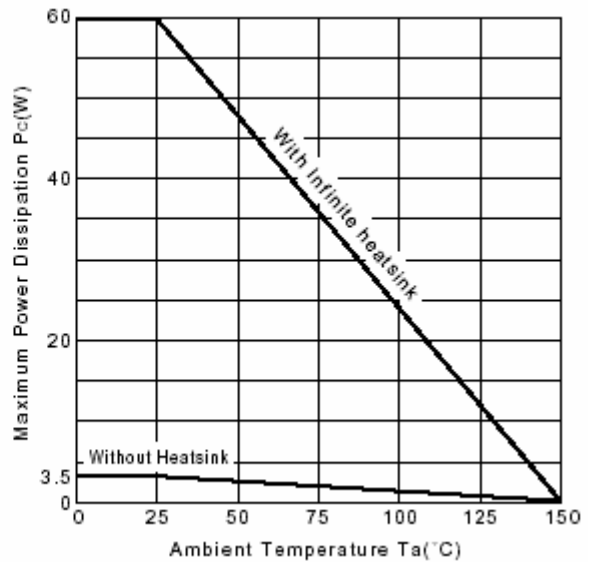


Fig.6 P_c-T_a Derating

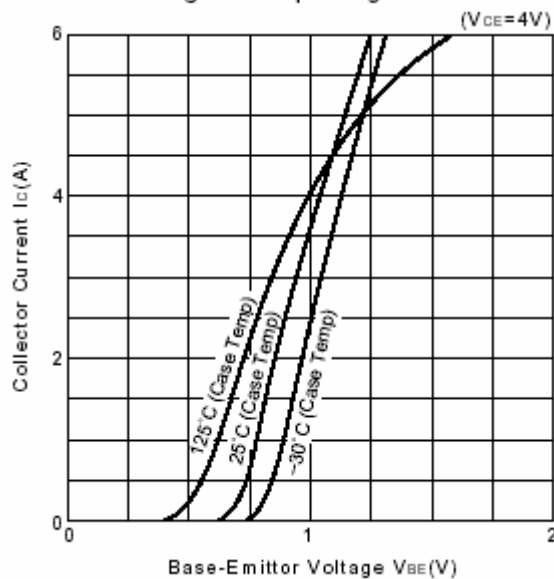


Fig.7 I_c-V_{be}

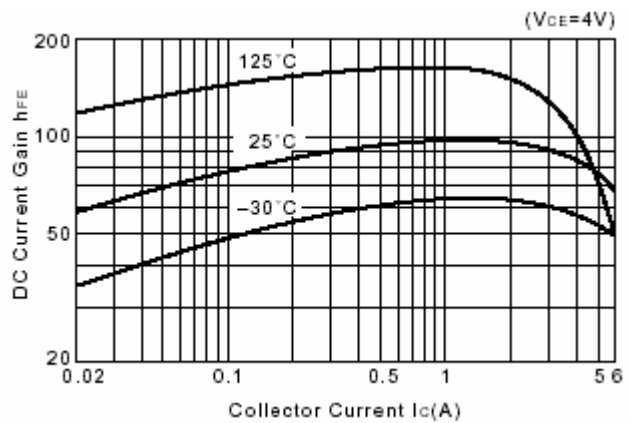


Fig.8 DC current Gain