

Silicon NPN Power Transistors

2SC3466

DESCRIPTION

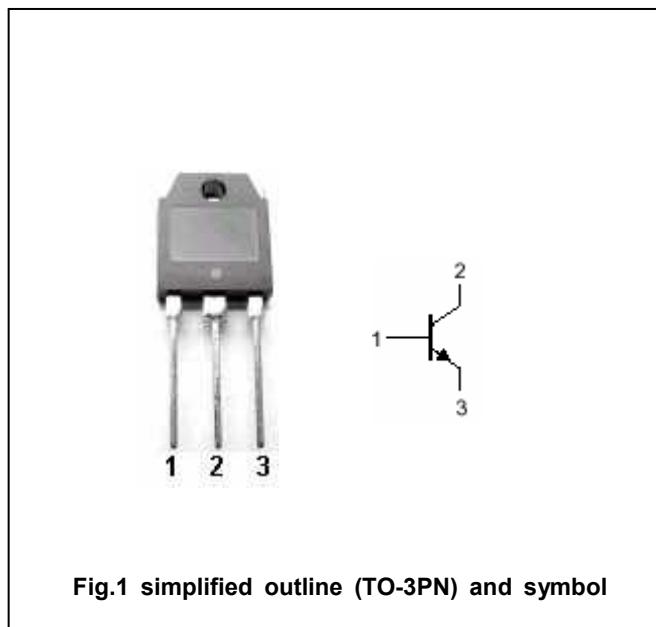
- With TO-3PN package
- High breakdown voltage and high reliability.
- Fast switching speed
- Wide area of safe operation

APPLICATIONS

- Switching regulator applications

PINNING

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

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1200	V
V_{CEO}	Collector-emitter voltage	Open base	650	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		8	A
I_{CM}	Collector current-peak		20	A
I_B	Base current		3	A
P_C	Collector power dissipation	$T_C = 25\square$	120	W
T_j	Junction temperature		150	$\square$
T_{stg}	Storage temperature		-55~150	$\square$

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=5mA ; R_{BE}=\infty$	650			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA ; I_E=0$	1200			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4A ; I_B=0.8A$			3.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4A ; I_B=0.8A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=650V ; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			100	μA
h_{FE-1}	DC current gain	$I_C=1A ; V_{CE}=5V$	10		40	
h_{FE-2}	DC current gain	$I_C=4A ; V_{CE}=5V$	6			
C_{ob}	Output capacitance	$I_E=0 ; V_{CB}=10V ; f=1MHz$		120		pF
f_T	Transition frequency	$I_C=1A ; V_{CE}=10V$		5		MHz

Switching times

t_{on}	Turn-on time	$I_C=4A ; R_L=50\Omega$ $I_{B1}=0.8A ; I_{B2}=-1.6A$ $V_{CC}=200V$			1.0	μs
t_{stg}	Storage time				4.0	μs
t_f	Fall time				0.7	μs

◆ h_{FE-1} Classifications

K	L	M
10-20	15-30	20-40

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[illegible]

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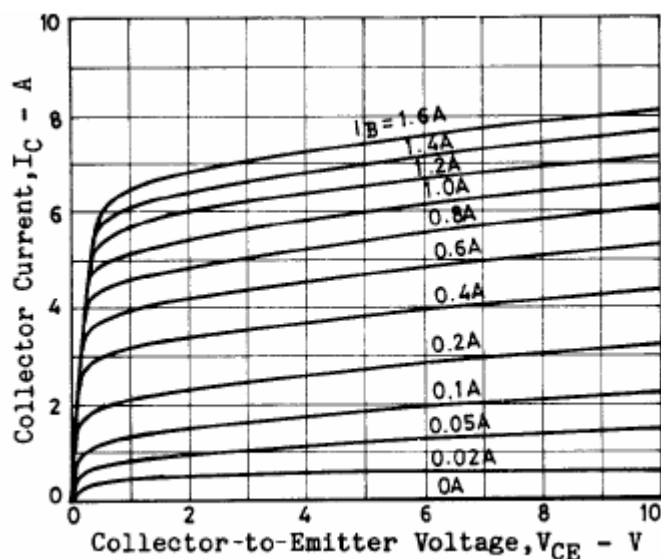


Fig.3 Static Characteristic

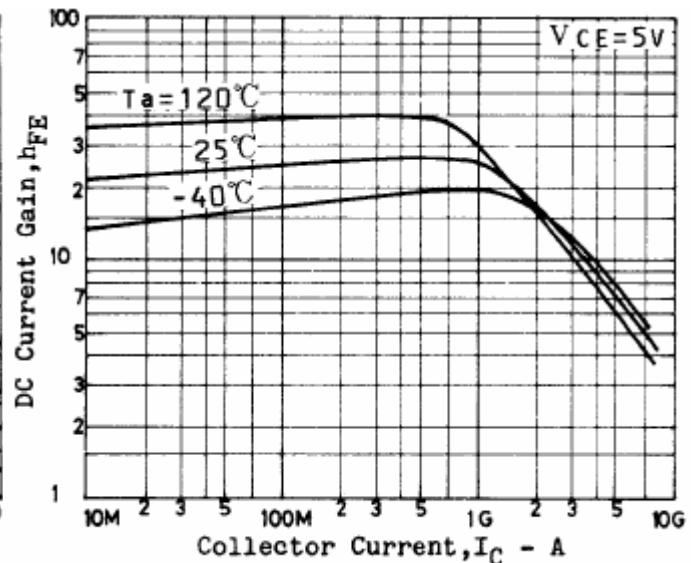


Fig.4 DC current Gain

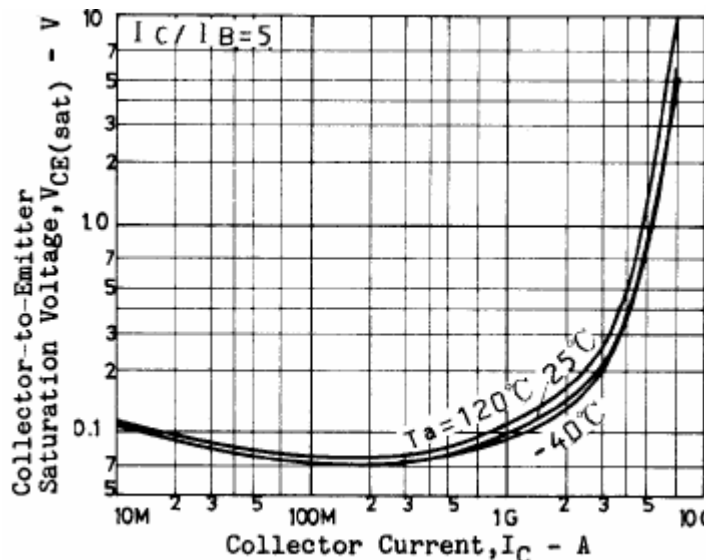


Fig.5 Collector-Emitter Saturation Voltage

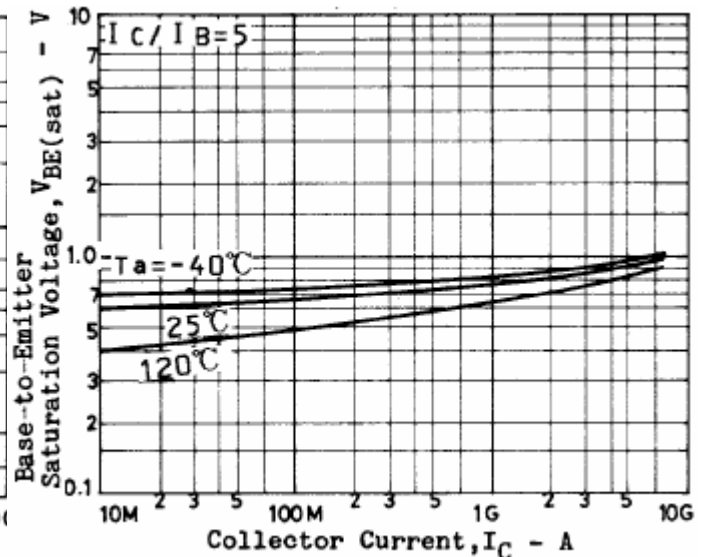


Fig.6 Base-Emitter Saturation Voltage

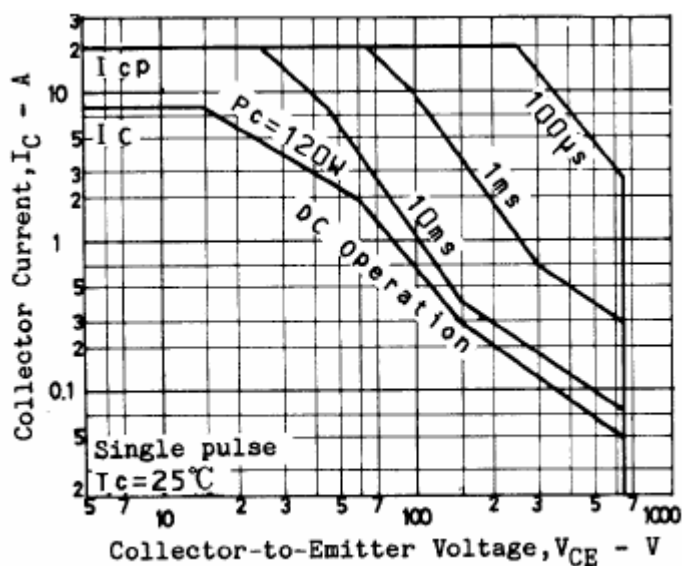


Fig.7 Safe Operating Area