

Silicon PNP Darlington Power Transistors

2SB1560

DESCRIPTION

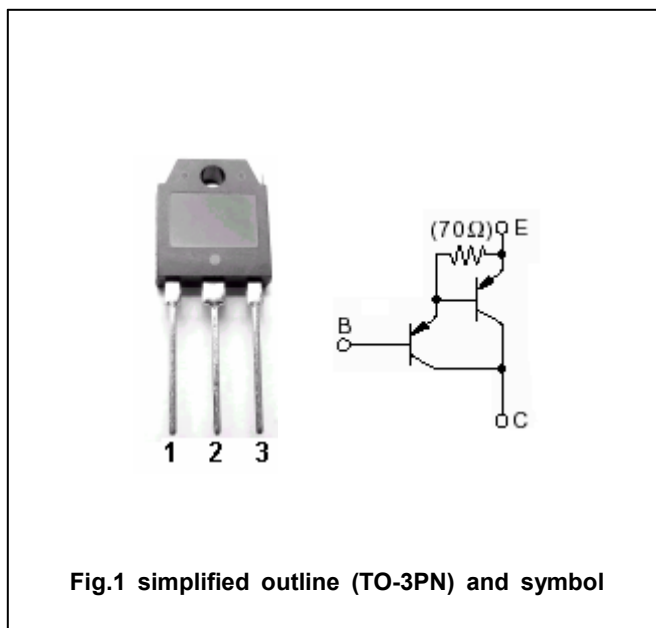
- With TO-3PN package
- Complement to type 2SD2390

APPLICATIONS

- Audio ,regulator and general purpose

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	-160	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_B	Base current		1	A
P_C	Collector power dissipation	$T_C = 25\square$	100	W
T_j	Junction temperature		150	$\square$
T_{stg}	Storage temperature		-55~150	$\square$

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CHARACTERISTICS

T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-30mA ; I _B =0	-150			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-7A ; I _B =-7mA			-2.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-7A ; I _B =-7mA			-3.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-160V; I _E =0			-100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-100	μA
h _{FE}	DC current gain	I _C =-7A ; V _{CE} =-4V	5000			
C _{ob}	Output capacitance	I _E =0 ; V _{CB} =10V; f=1MHz		230		pF
f _T	Transition frequency	I _C =-2A ; V _{CE} =-12V		50		MHz

Switching times

t _{on}	Turn-on time	I _C =-7A; R _L =10Ω I _{B1} =- I _{B2} =-7mA V _{CC} =-70V		0.8		μs
t _s	Storage time			3.0		μs
t _f	Fall time			1.2		μs

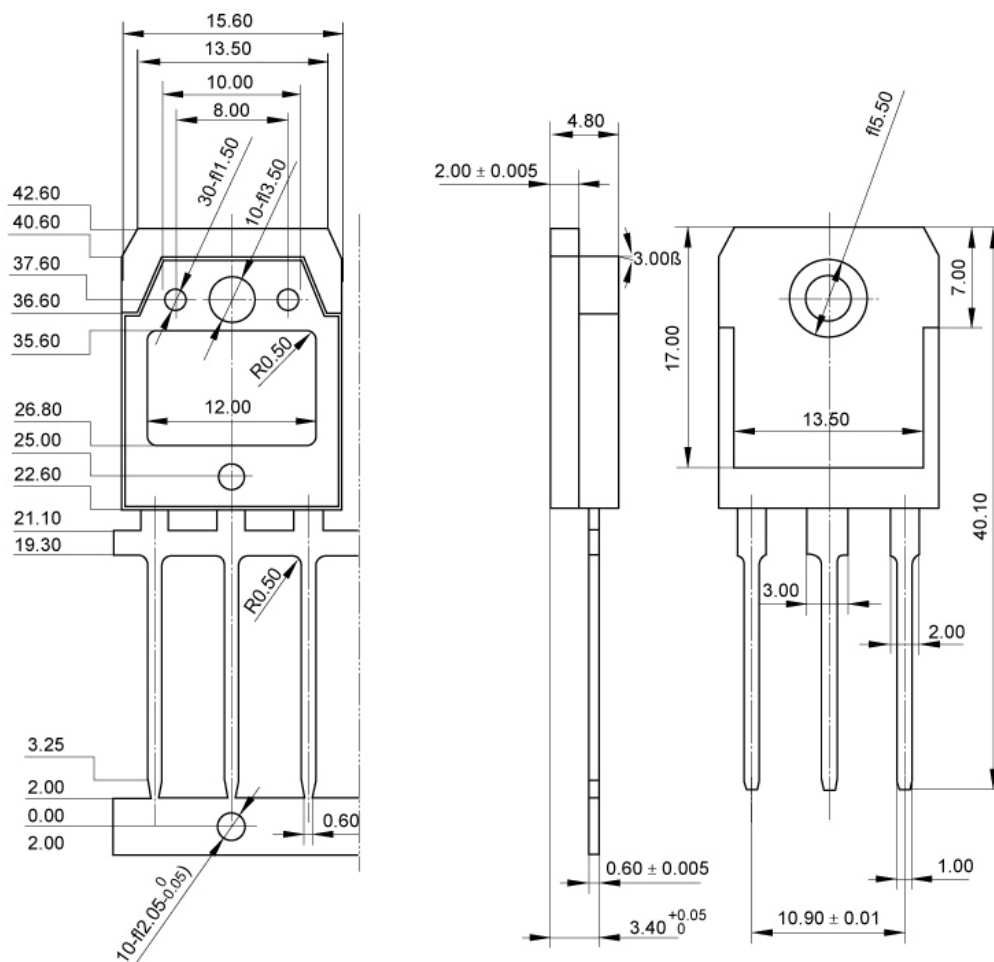
◆ h_{FE} Classifications

O	P	Y
5000-12000	6500-20000	15000-30000

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PACKAGE OUTLINE

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

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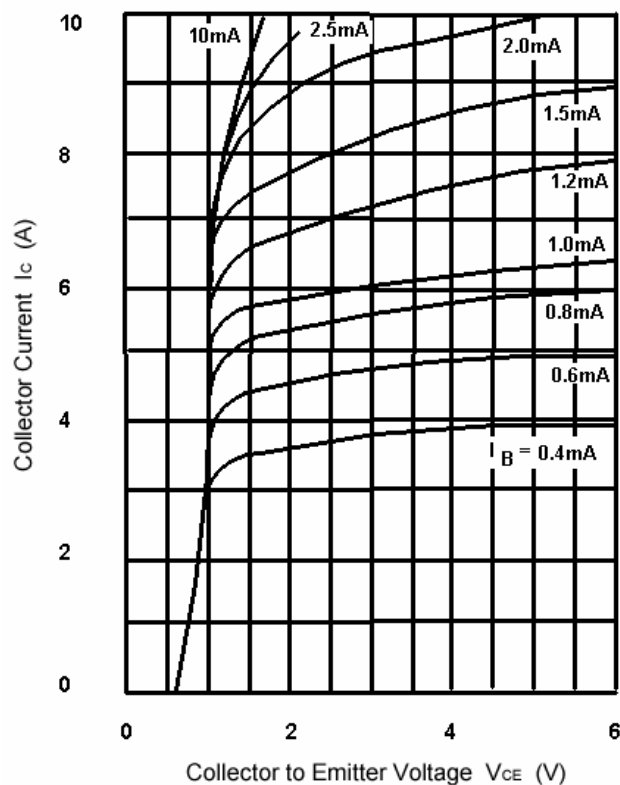


Fig.3 Static Characteristic

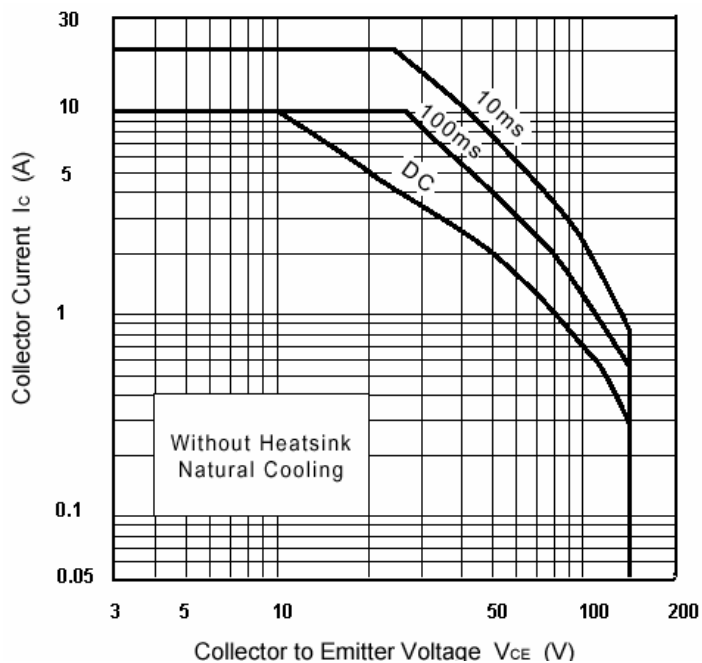


Fig.4 Safe Operating Area

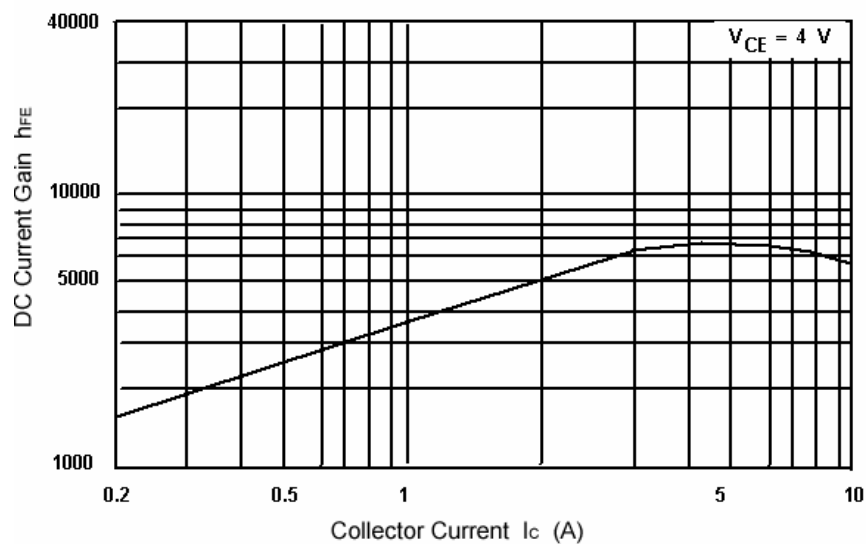


Fig.5 DC current Gain