Silicon NPN Power Transistors 2SD1193

DESCRIPTION

- ·With TO-3PN package
- ·Complement to type 2SB883
- ·High DC current gain
- ·High current capacity and wide ASO
- ·Low saturation voltage

APPLICATIONS

·Motor drivers, printer hammer drivers,
relay drivers,voltage regulator control.

PINNING

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

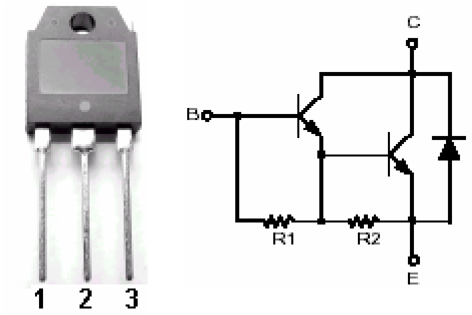

Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	70	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current (DC)		15	A
I_{CP}	Collector current (Pulse)		20	A
P_C	Collector power dissipation	T_C=25℃	70	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=50mA ;R_{BE}=∞	60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=5mA ;I_E=0	70			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=7A ;I_B=14mA			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=7A ;I_B=14mA			2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=40V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			3	mA
h_{FE}	DC current gain	I_C=7A ; V_{CE}=2V	2000			
f_T	Transition frequency	I_C=7A ; V_{CE}=5V		20		MHz

PACKAGE OUTLINE

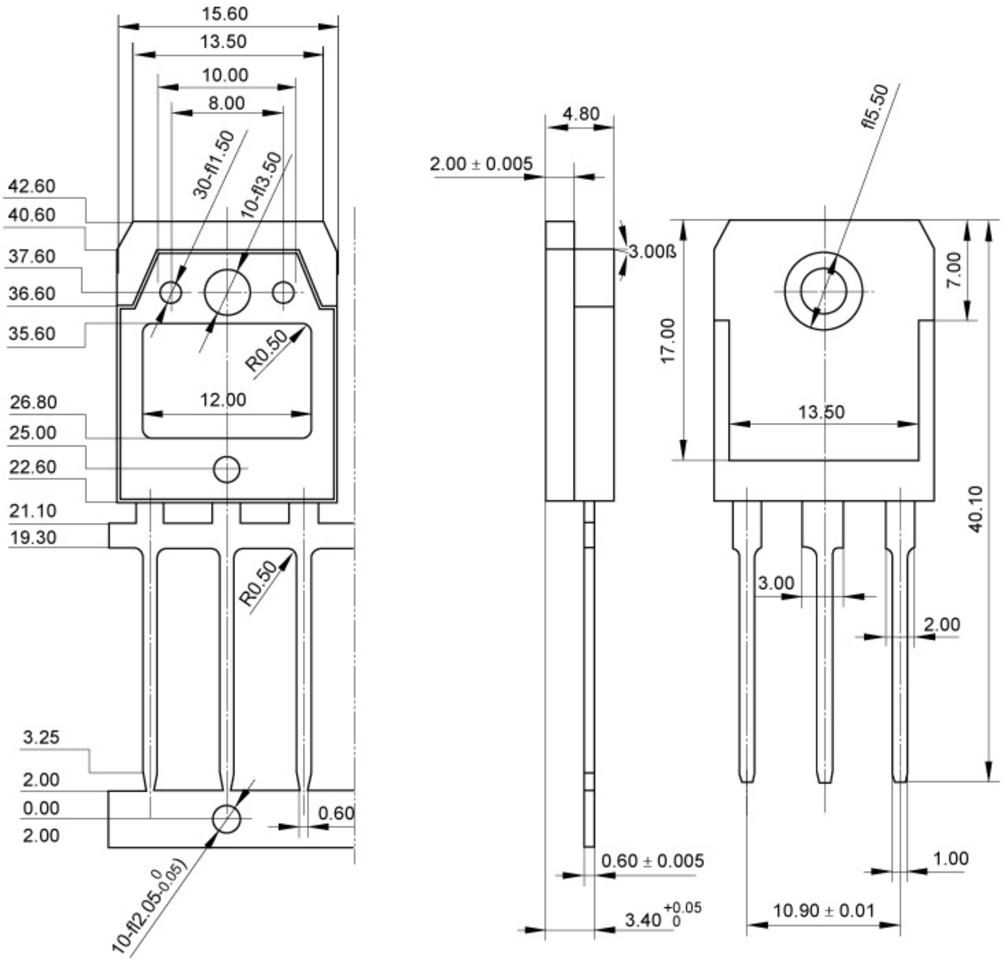

Fig.2 outline dimensions