Silicon PNP Power Transistors 2SA1805

DESCRIPTION

·With TO-3PFM package
·Complement to type 2SC4690

APPLICATIONS

·Power amplifier applications
·Recommend for 70W high fidelity audio frequency amplifier output stage

PINNING (see Fig.2)

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

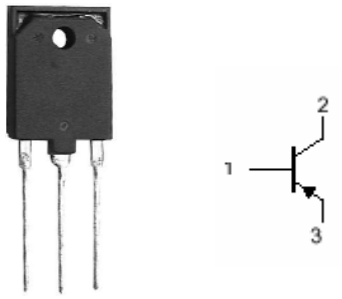

Fig.1 simplified outline (TO-3PFM) and symbol

Absolute maximum ratings(Tc=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-140	V
V_{CEO}	Collector-emitter voltage	Open base	-140	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_{CM}	Collector current-peak		-20	A
I_B	Base current		-1	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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=-50mA; I_B=0	-140			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-7A;I_B=-0.7A			-2.0	V
V_{BE}	Base-emitter voltage	I_C=-5A ; V_{CE}=-5V			-1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-140V; I_E=0			-5	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-5V; I_C=0			-5	μA
h_{FE-1}	DC current gain	I_C=-1A ; V_{CE}=-5V	55		160	
h_{FE-2}	DC current gain	I_C=-5A ; V_{CE}=-5V	35			
f_T	Transition frequency	I_C=-1A ; V_{CE}=-5V		30		MHz
C_{OB}	Output capacitance	I_E=0; V_{CB}=-10V;f=1MHz		480		pF

◆ **h_{FE-1} classifications**

R	O
55-110	80-160

PACKAGE OUTLINE

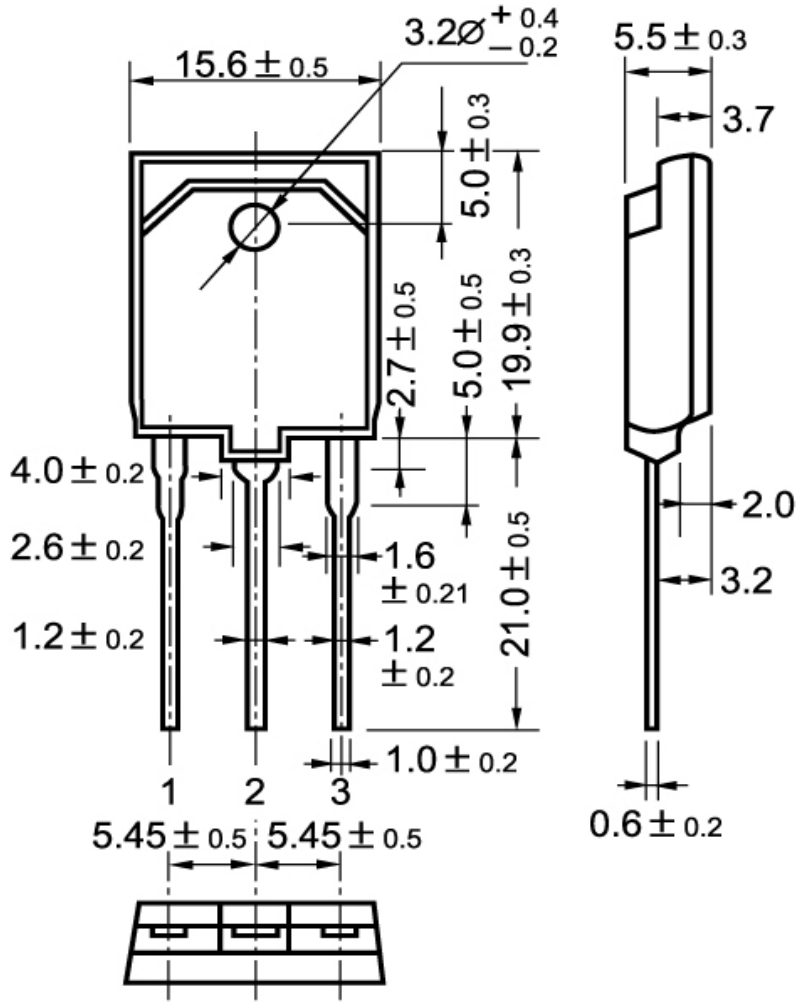

Fig.2 Outline dimensions

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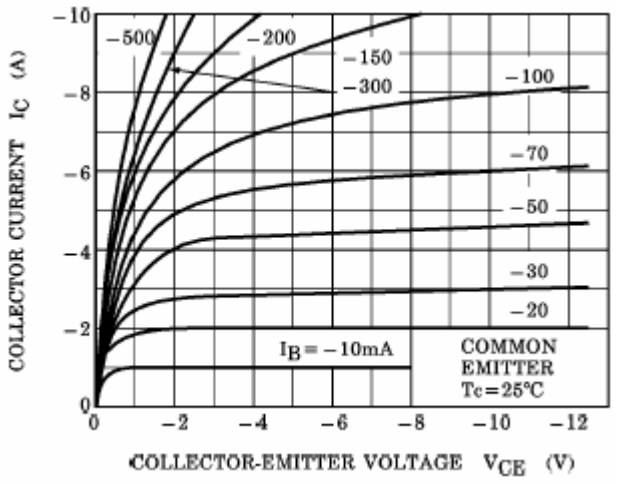

Fig.3 Static Characteristic

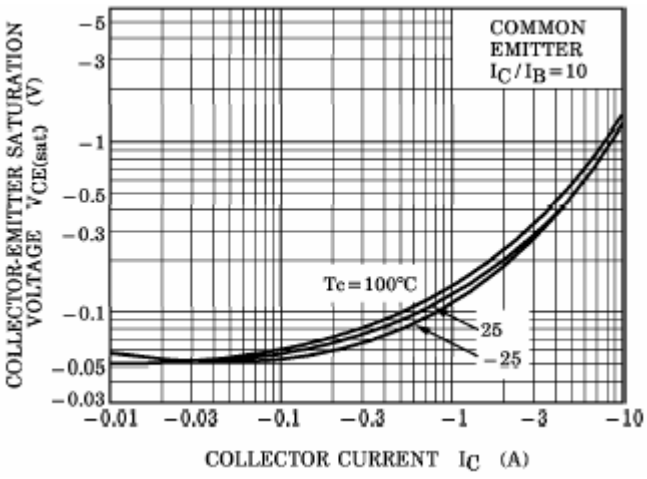

Fig.4 Collector-Emitter Saturation Voltage

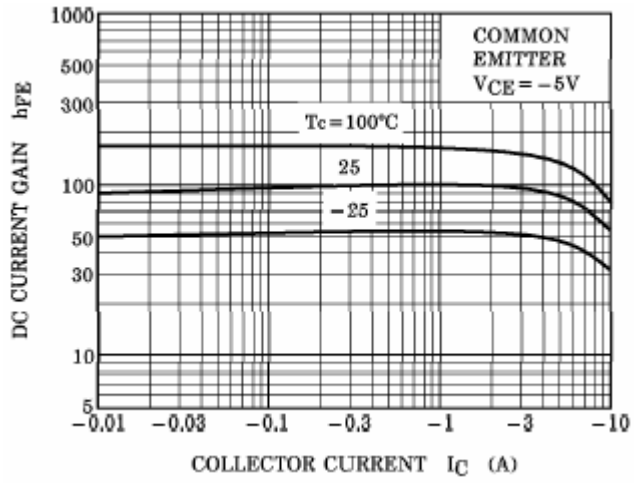

Fig.5 DC current Gain

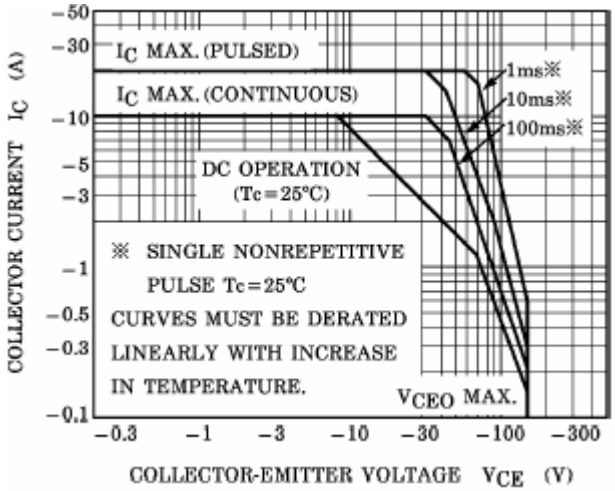

Fig.6 Safe Operating Area