Silicon PNP Power Transistors 2SA1907

DESCRIPTION

·With TO-3PML package

·Complement to type 2SC5099

APPLICATIONS

·Audio and general purpose

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

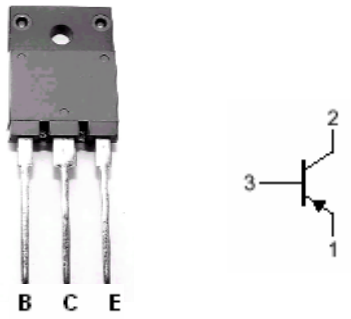

Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings(Tc=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-80	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□	60	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	-80			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-2A;I_B=-0.2 A			-0.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-80V; 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	
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-12V		20		MHz
C_{OB}	Output capacitance	I_E=0; V_{CB}=10V;f=1MHz		150		pF
Switching times						
t_{on}	Turn-on time	I_C=-3A;R_L=10Ω I_{B1}=-I_{B2}=-0.3A;V_{CC}=-30V		0.18		μs
t_s	Storage time			1.10		μs
t_f	Fall time			0.21		μs

◆ h_{FE} classifications

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

PACKAGE OUTLINE

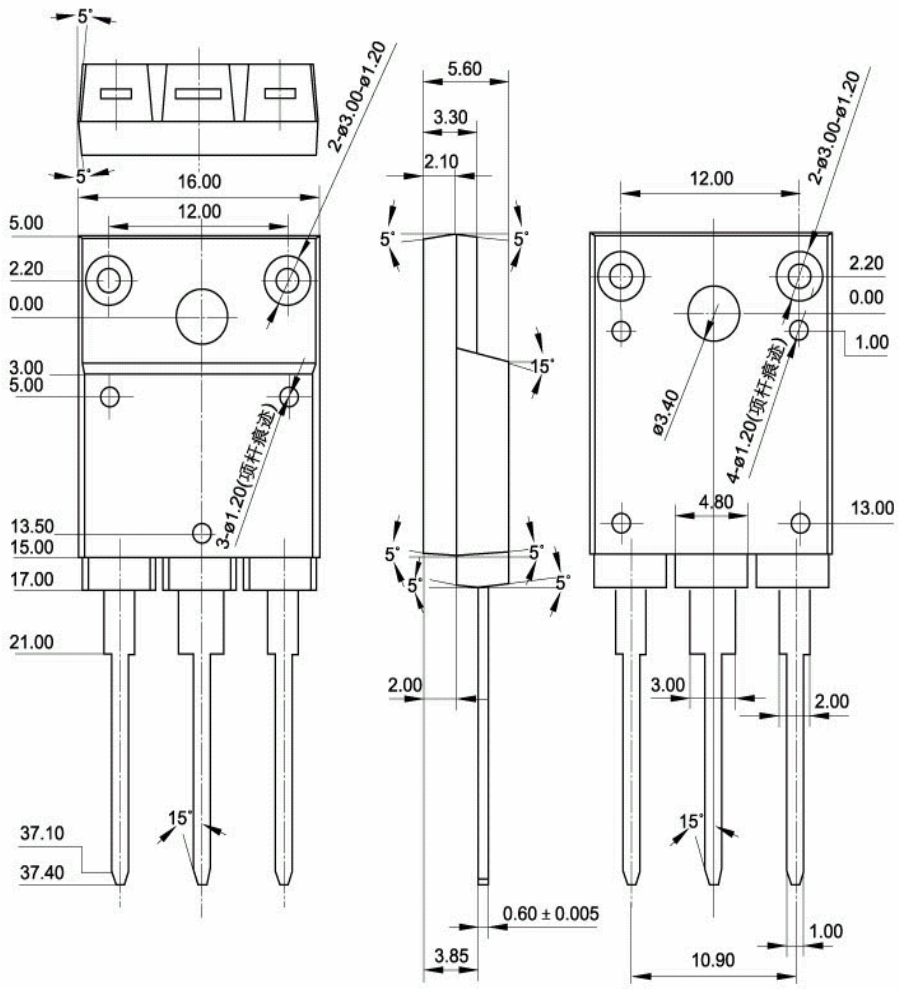

Fig.2 Outline dimensions

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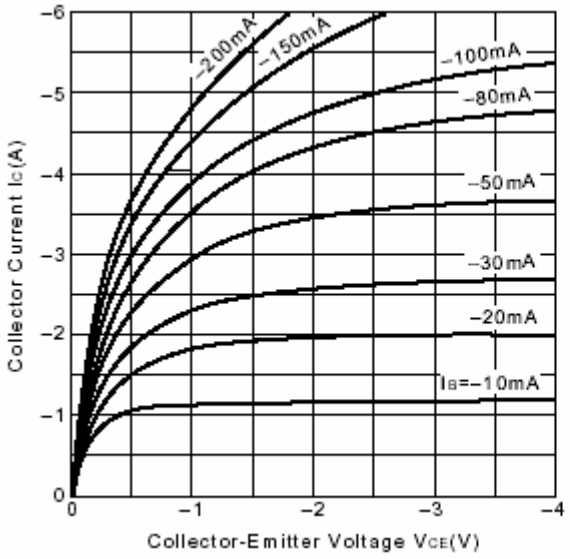

Fig.3 Static Characteristic

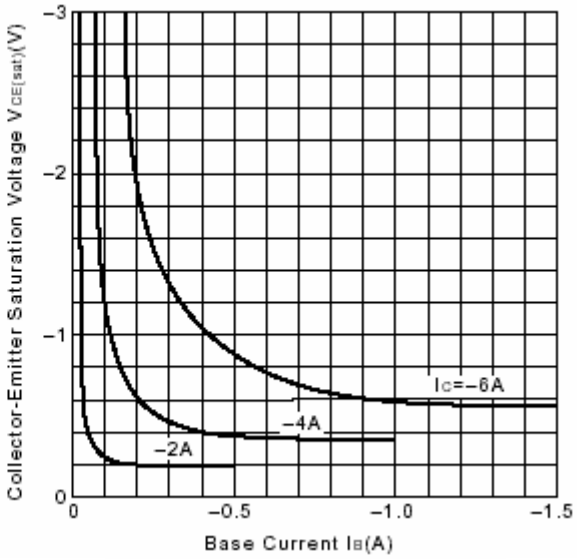

Fig.4 VCE(sat)−IB Characteristics

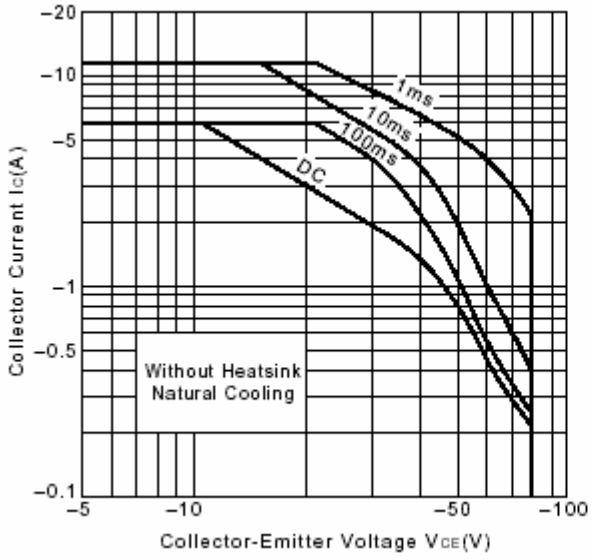

Fig.5 Safe Operating Area

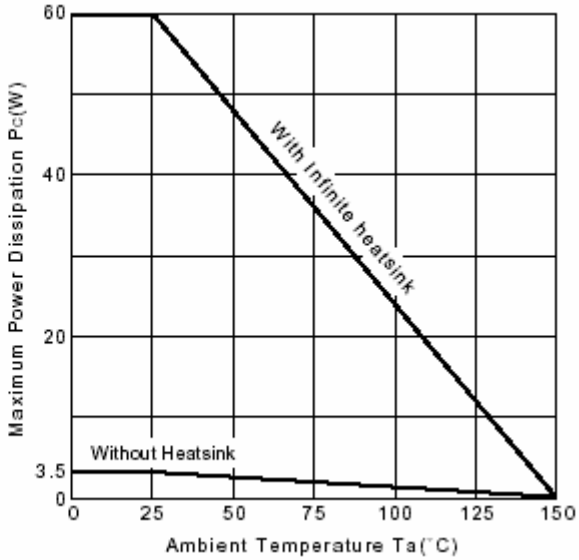

Fig.6 Pc−Ta Derating

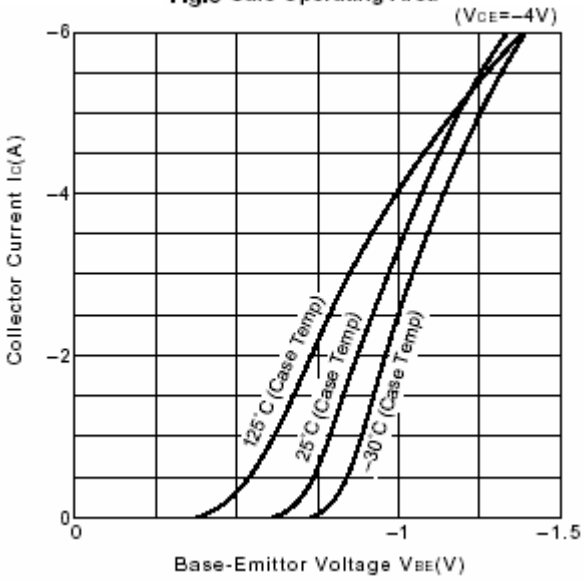

Fig.7 IC−VBE

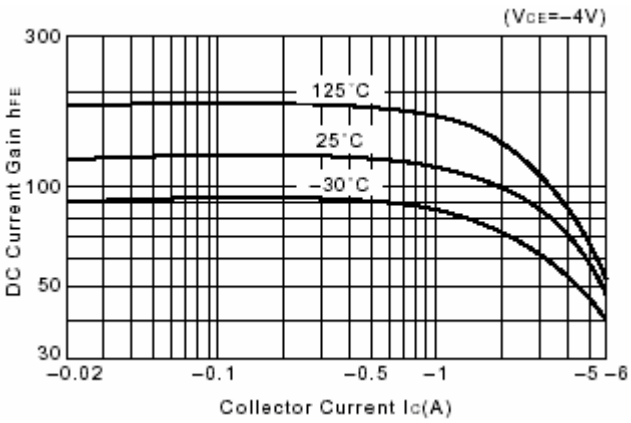

Fig.8 DC current Gain