Silicon PNP Power Transistors 2SA1216

DESCRIPTION

·With MT-200 package

·Complement to type 2SC2922

APPLICATIONS

·Audio and general purpose

PINNING(see Fig.2)

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

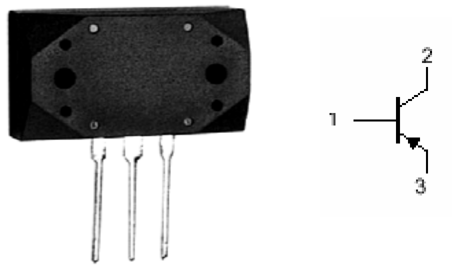

Fig.1 simplified outline (MT-200) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-180	V
V_{CEO}	Collector-emitter voltage	Open base	-180	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-17	A
I_B	Base current		-5	A
P_C	Collector power dissipation	T_C=25□	200	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=-25mA ; I_B=0	-180			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-8A ;I_B=-0.8A			-2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=-180V; 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=-8A ; V_{CE}=-4V	30			
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=-10V;f=1MHz		500		pF
f_T	Transition frequency	I_C=-2A ; V_{CE}=-12V		40		MHz

Switching times

t_{on}	Turn-on time	I_C=-10A;R_L=Ω I_{B1}=-I_{B2}=-1A V_{CC}=-40V		0.30		μs
t_s	Storage time			0.70		μs
t_f	Fall time			0.20		μs

◆ h_{FE} classifications

O	Y	P	G
30-60	50-100	70-140	90-180

PACKAGE OUTLINE

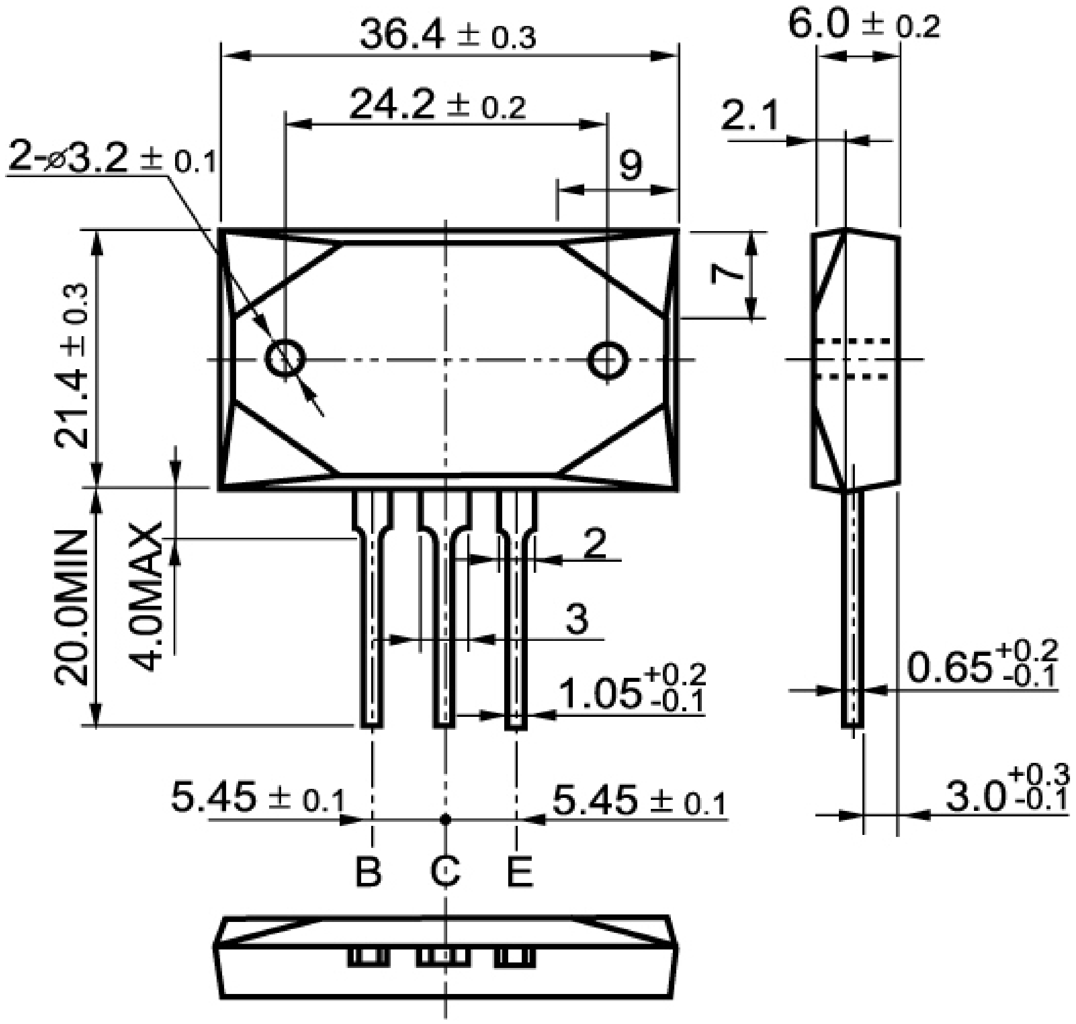

Fig.2 outline dimensions

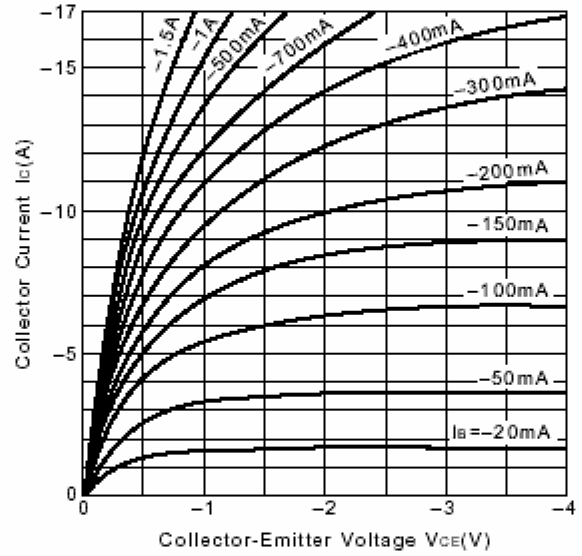

Fig.3 Static Characteristic

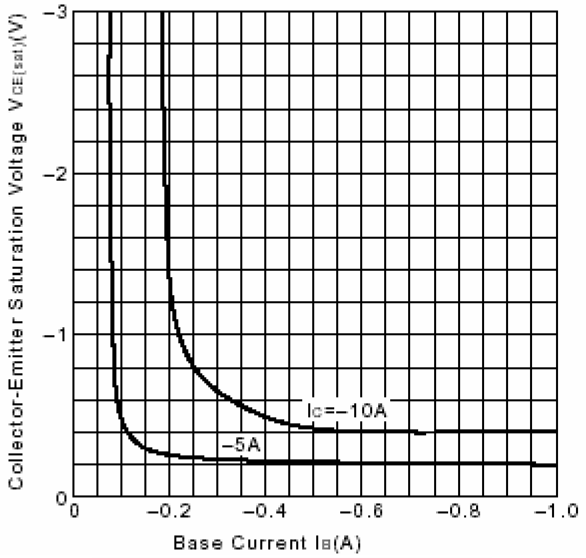

Fig.4 VCE(sat)−IB Characteristics

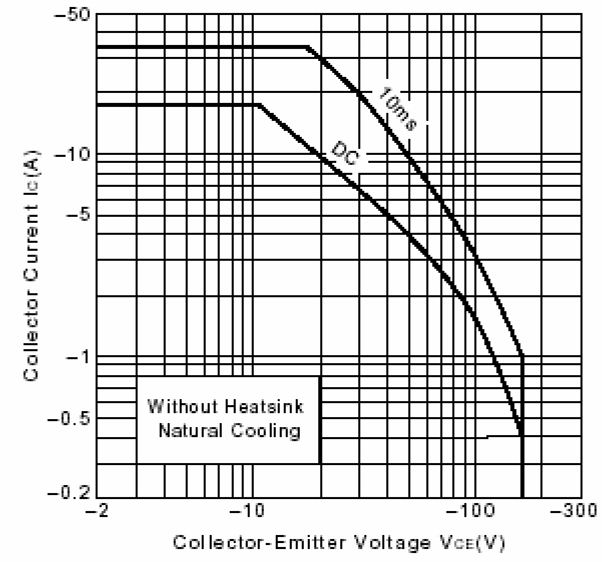

Fig.5 Safe Operating Area

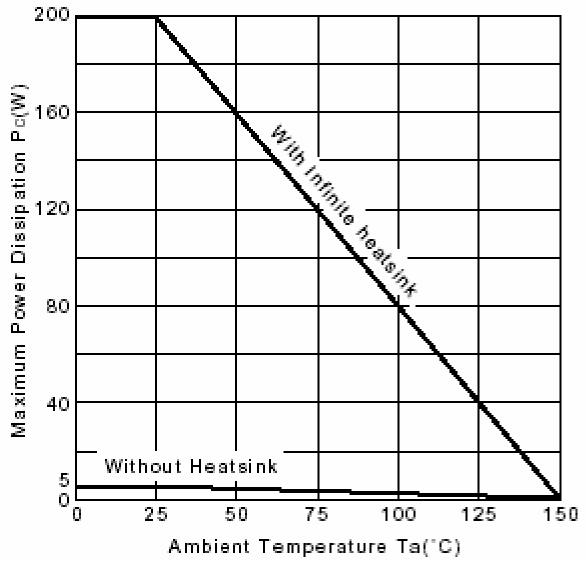

Fig.6 Pc−Ta Derating

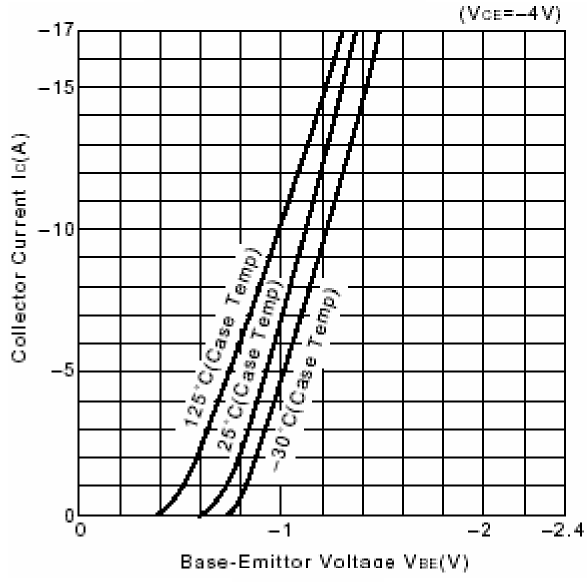

Fig.7 Ic−VBE

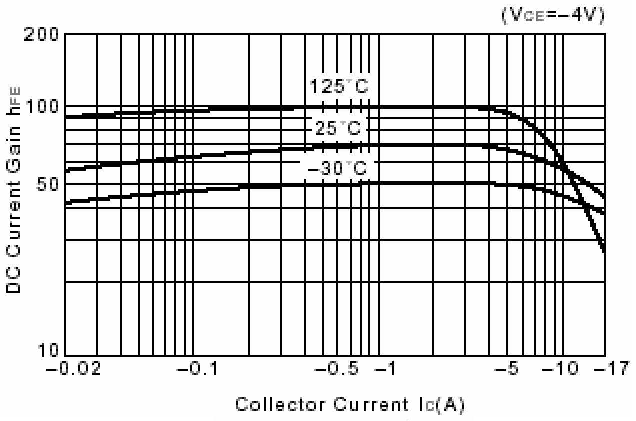

Fig.8 DC current Gain