

Silicon PNP Power Transistors

2SA1216

DESCRIPTION

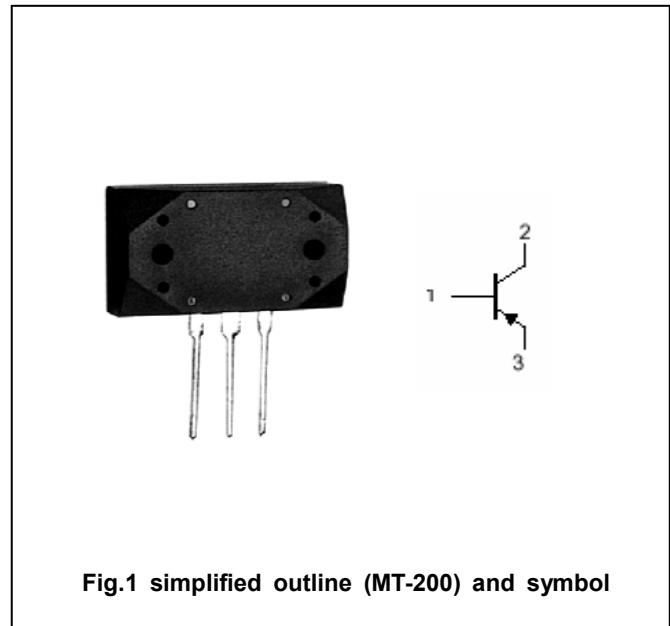
- With MT-200 package
- Complement to type 2SC2922

APPLICATIONS

- Audio and general purpose

PINNING(see Fig.2)

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

**Absolute maximum ratings(Ta=25°C)**

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	$T_C=25^\circ\text{C}$	200	W
T_j	Junction temperature		150	°C
T_{stg}	Storage temperature		-55~150	°C

Silicon PNP Power Transistors

2SA1216

CHARACTERISTICS

Tj=25°C 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	$I_C=-10A ; R_L=\Omega$ $I_{B1}=-I_{B2}=-1A$ $V_{CC}=-40V$		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

Silicon PNP Power Transistors

2SA1216

PACKAGE OUTLINE

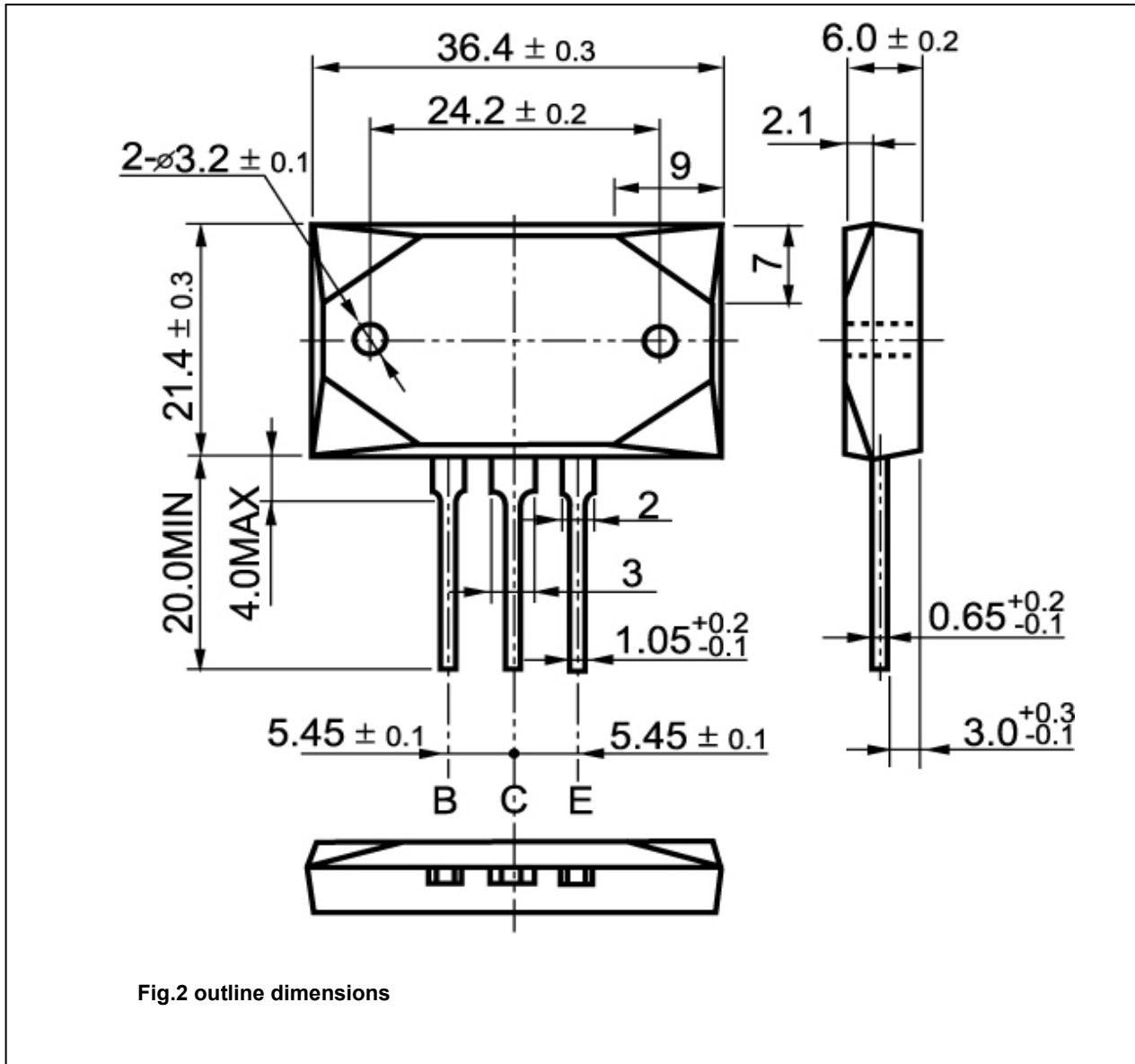


Fig.2 outline dimensions

Silicon PNP Power Transistors

2SA1216

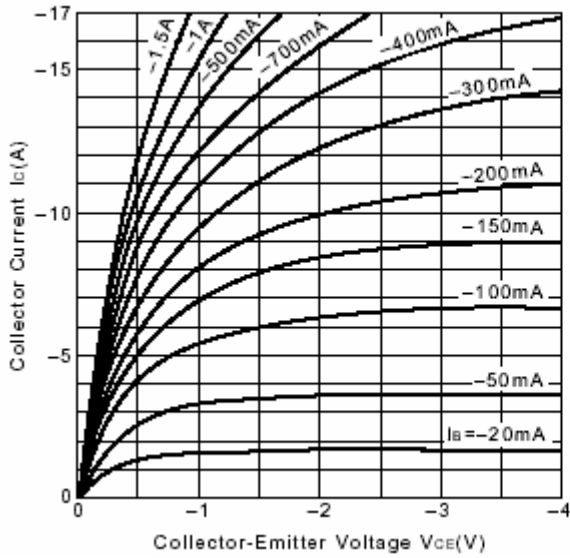


Fig.3 Static Characteristic

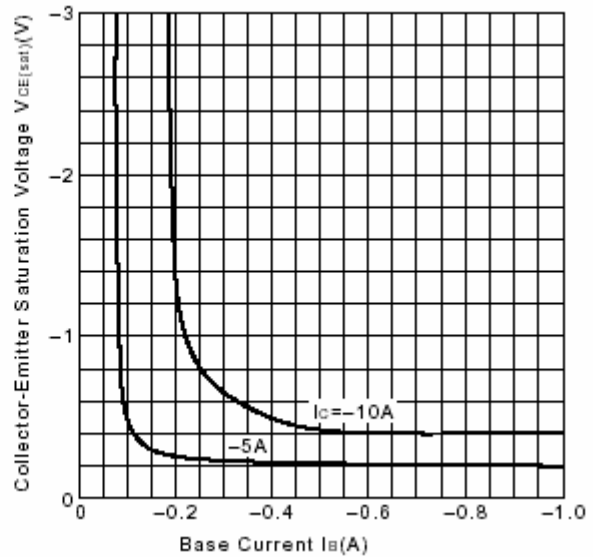


Fig.4 $V_{CE(sat)}$ - I_B Characteristics

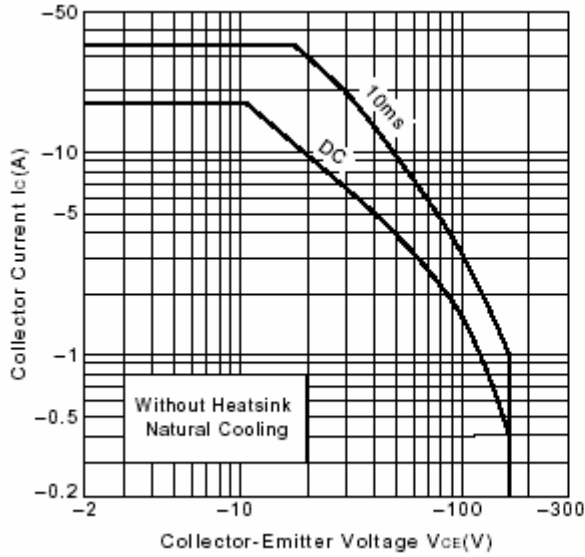


Fig.5 Safe Operating Area

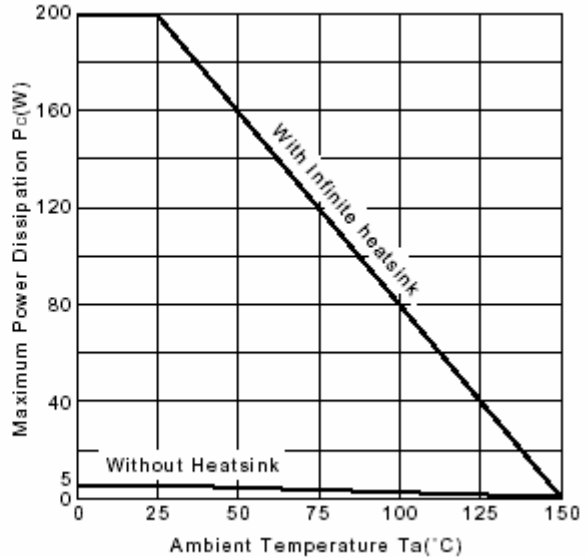


Fig.6 P_c - T_a Derating

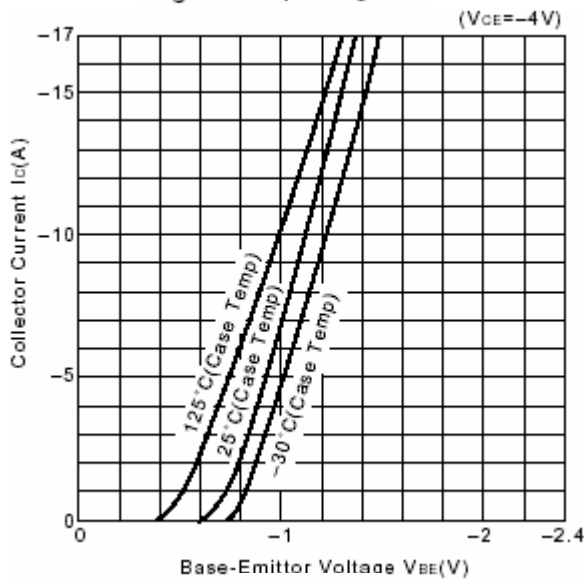


Fig.7 I_C - V_{BE}

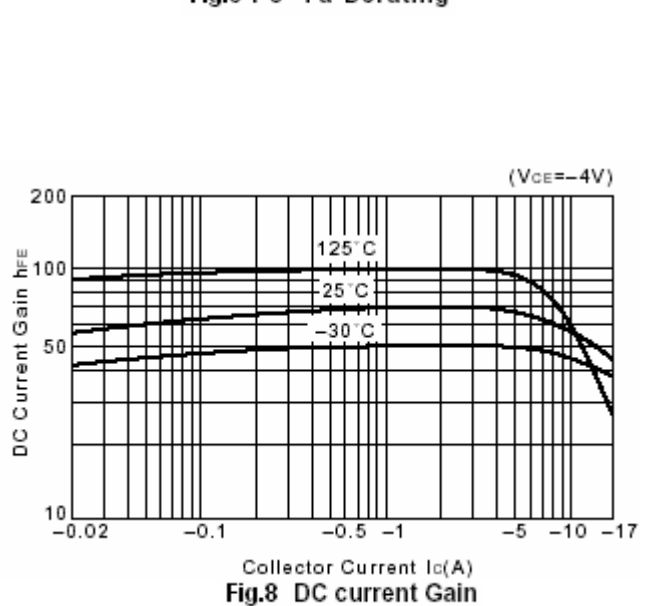


Fig.8 DC current Gain