Silicon PNP Power Transistors 2SA1220 2SA1220A

DESCRIPTION

・With TO-126 package
・Complement to type 2SC2690/2690A

APPLICATIONS

・Audio frequency power amplifier
・High frequency power amplifier

PINNING

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

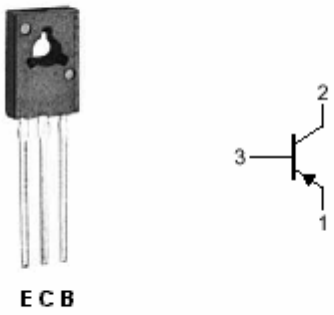

Fig.1 simplified outline (TO-126) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SA1220	Open emitter	-120	V
		2SA1220A		-160	
V_{CEO}	Collector-emitter voltage	2SA1220	Open base	-120	V
		2SA1220A		-160	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-1.2	A
I_{CM}	Collector current-peak			-2.5	A
I_B	Base current			-0.3	A
P_D	Total power dissipation		T_a=25℃	1.2	W
			T_C=25℃	20	
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_{CEsat}	Collector-emitter saturation voltage	I_C=-1A; I_B=-0.2A			-0.7	V
V_{BEsat}	Base-emitter saturation voltage	I_C=-1A ;I_B=-0.2A			-1.3	V
I_{CBO}	Collector cut-off current	V_{CB}=-120V; I_E=0			-1	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-3V; I_C=0			-1	μA
h_{FE-1}	DC current gain	I_C=-5mA ; V_{CE}=-5V	35			
h_{FE-2}	DC current gain	I_C=-0.3A ; V_{CE}=-5V	60		320	
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=-10V f=1MHz		26		pF
f_T	Transition frequency	I_C=-0.2A ; V_{CE}=5V		175		MHz

◆ **h_{FE-2} Classifications**

R	Q	P
60-120	100-200	160-320

PACKAGE OUTLINE

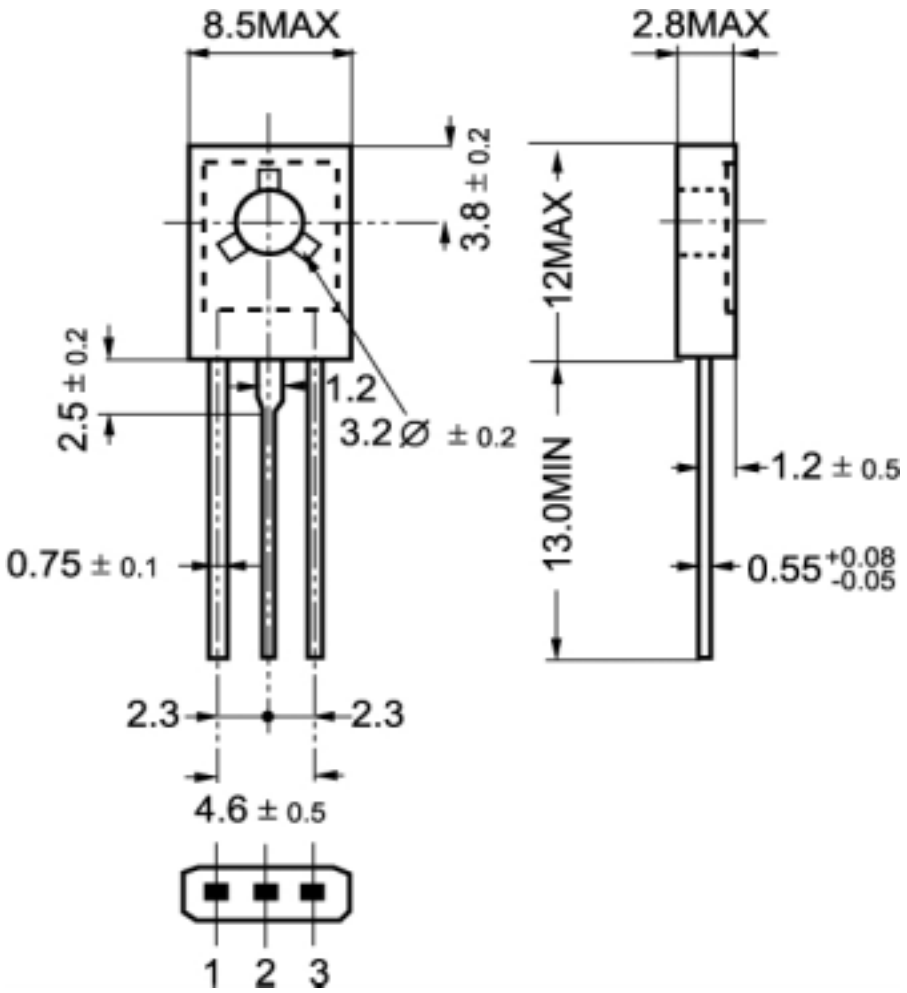

Fig.2 Outline dimensions

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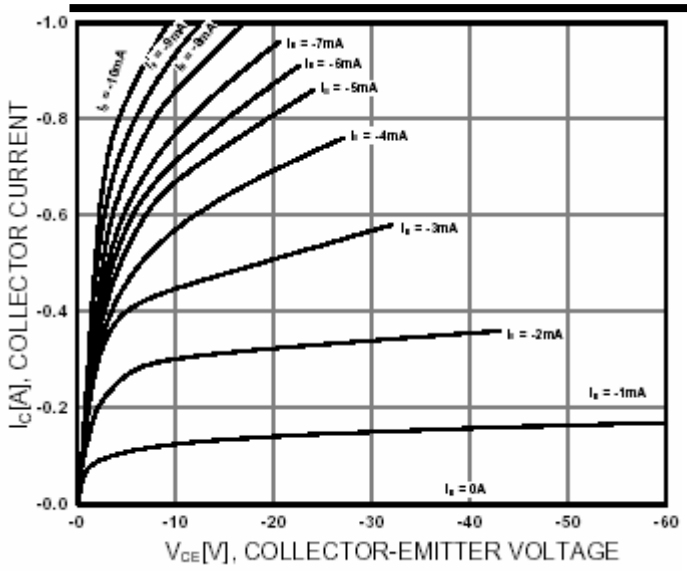

Fig.3 Static Characteristic

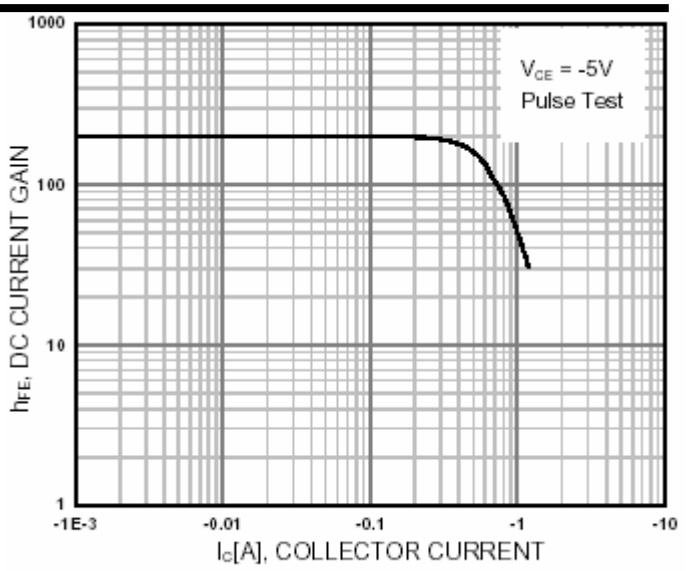

Fig.4 DC current Gain

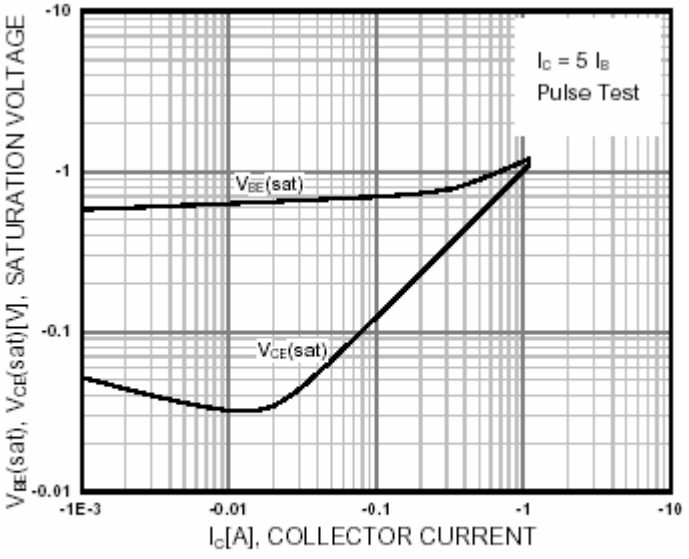

Fig.5 Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

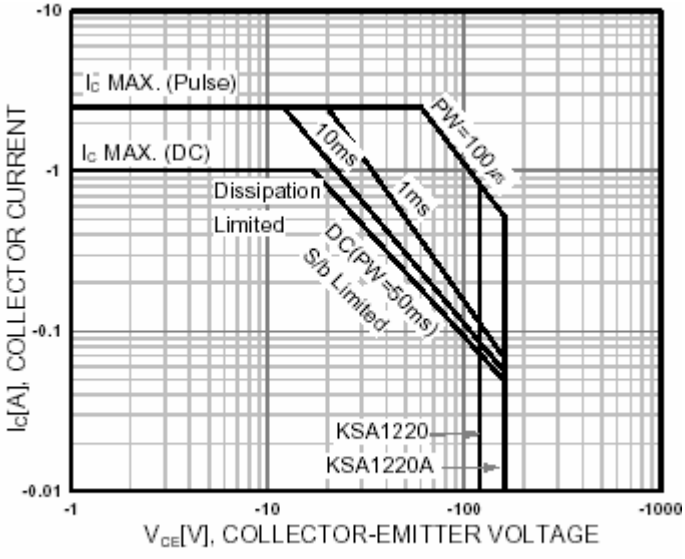

Fig.6 Safe Operating Area

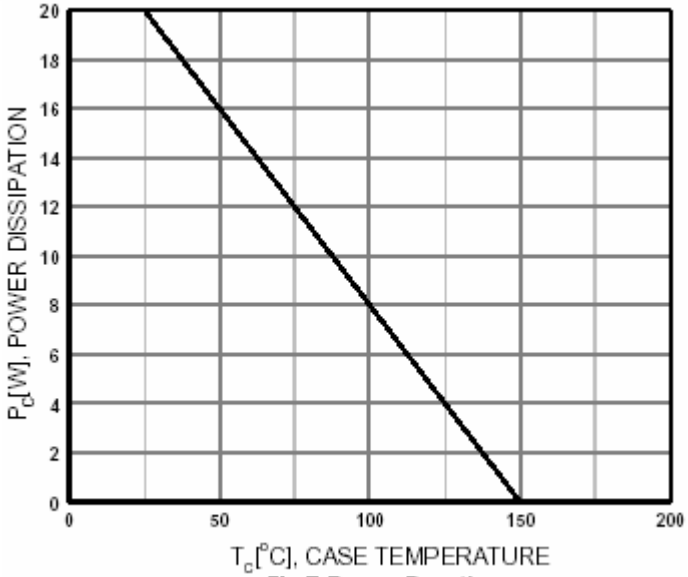

Fig.7 Power Derating