

**Silicon PNP Power Transistors**

**2SA743 2SA743A**

**DESCRIPTION**

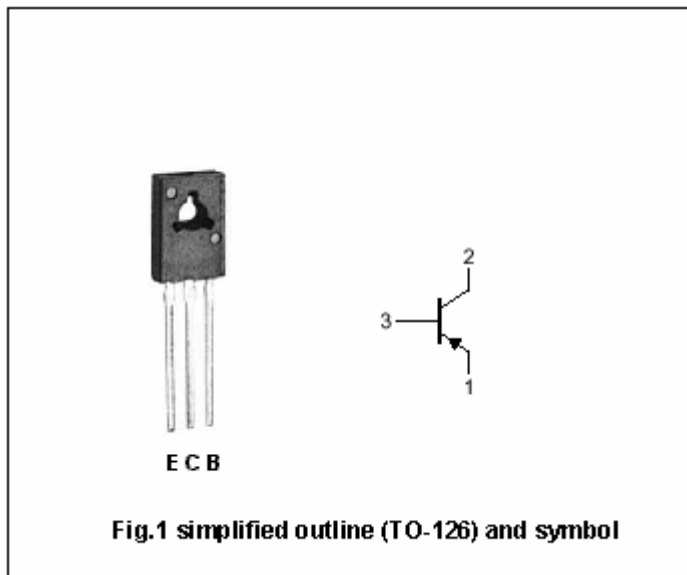
- With TO-126 package
- Complement to type 2SC1212/1212A

**APPLICATIONS**

- For low frequency power amplifier applications

**PINNING**

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



**Absolute maximum ratings(Ta=25 )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2SA743	-50	V
		2SA743A	-80	
V <sub>CEO</sub>	Collector- emitter voltage	2SA743	-50	V
		2SA743A	-80	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-4	V
I <sub>C</sub>	Collector current		-1	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25	0.75	W
		T <sub>C</sub> =25	8	
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-55 ~ +150	

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	2SA743	I <sub>C</sub> =-10mA ; R <sub>BE</sub> =	-50		V
		2SA743A		-80		
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	2SA743	I <sub>C</sub> =-1mA ; I <sub>E</sub> =0	-50		V
		2SA743A		-80		
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA ; I <sub>C</sub> =0	-4			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A ; I <sub>B</sub> =-0.1A		-0.75	-1.5	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-50mA ; V <sub>CE</sub> =-4V		-0.65	-1.0	V
I <sub>CER</sub>	Collector cut-off current	2SA743	V <sub>CE</sub> =-50V ; R <sub>BE</sub> =1k		-20	μA
		2SA743A		V <sub>CE</sub> =-80V ; R <sub>BE</sub> =1k		-20
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-50mA ; V <sub>CE</sub> =-4V	60		200	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-4V	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-30mA ; V <sub>CE</sub> =-4V		120		MHz

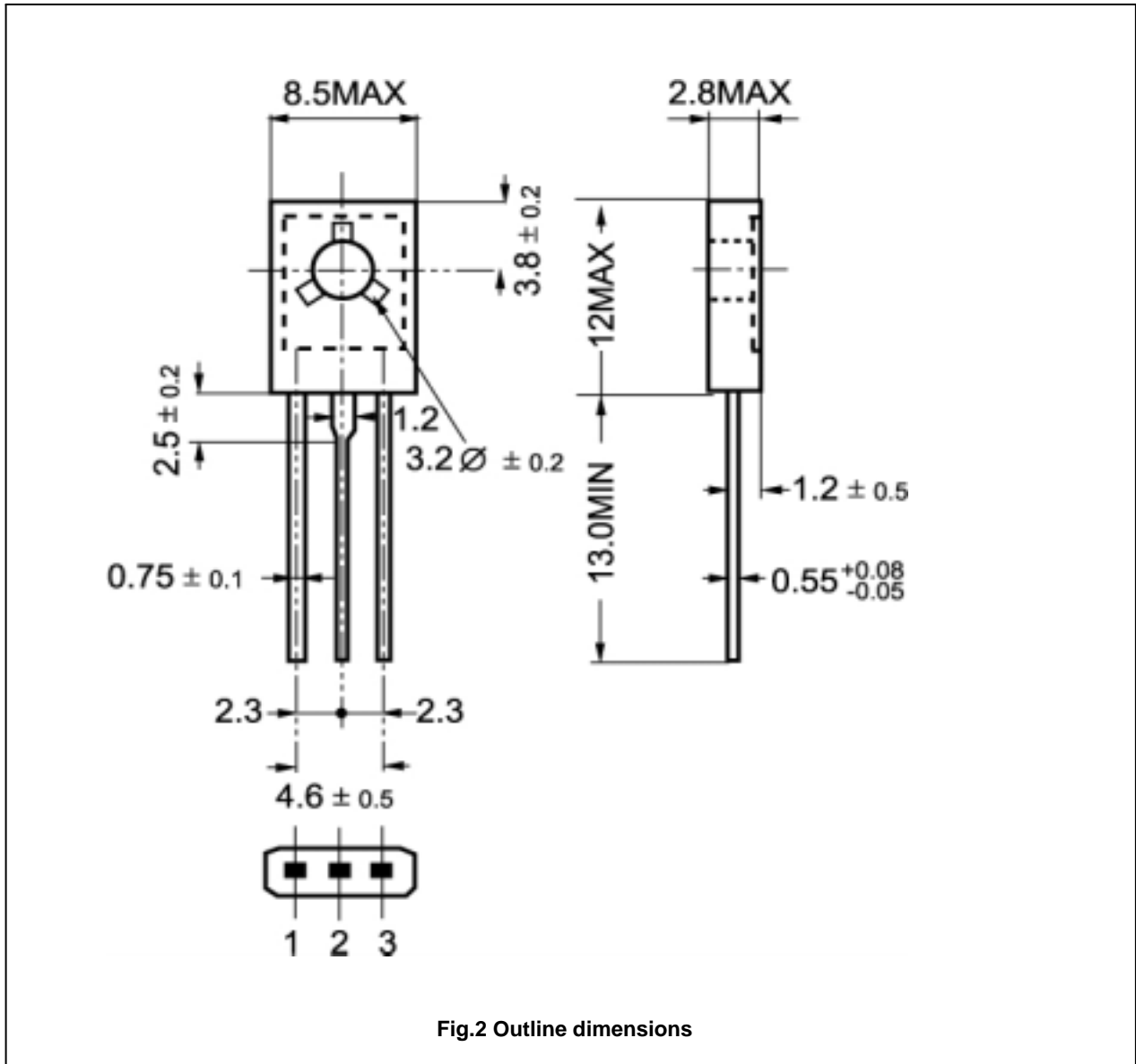
◆ h<sub>FE-1</sub> Classifications

B	C
60-120	100-200

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PACKAGE OUTLINE



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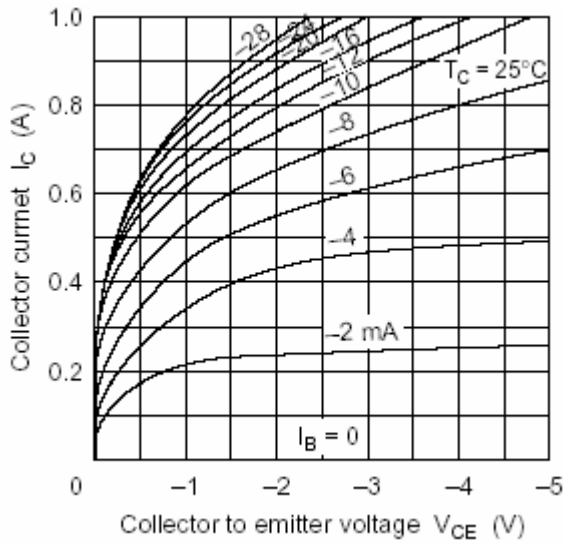


Fig.3 Static Characteristic

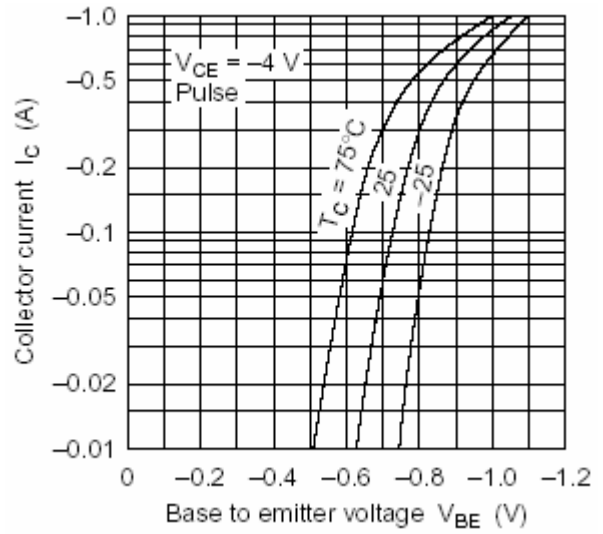


Fig.4 Base-Emitter On Voltage

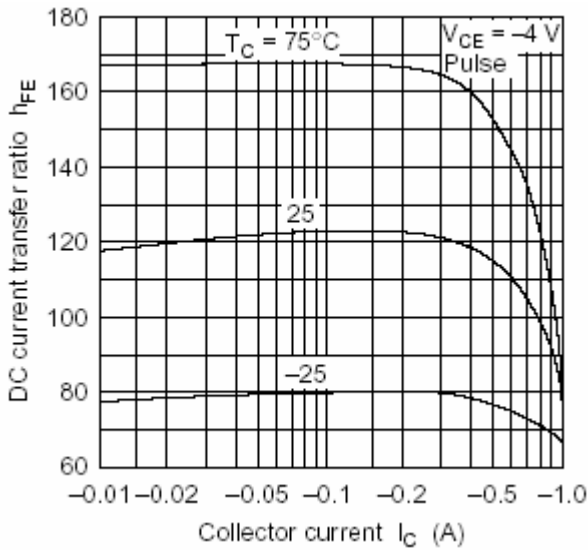


Fig.5 DC current Gain

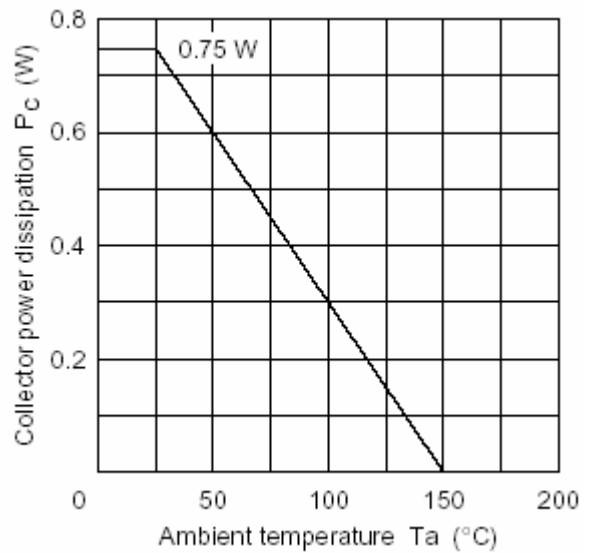


Fig.6 Power Derating

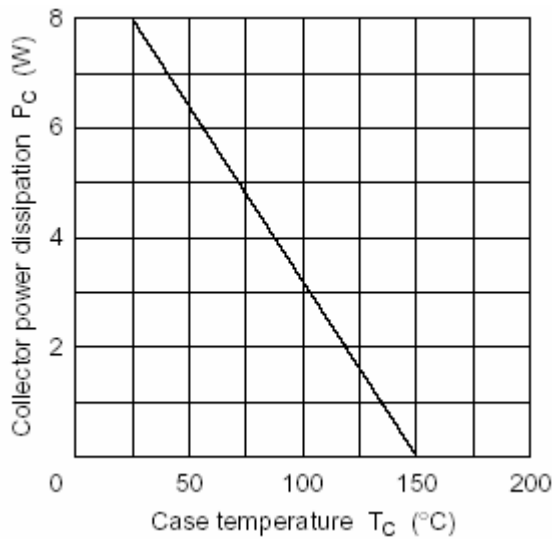


Fig.7 Power Derating