

SavantIC Semiconductor

Product Specification

Silicon PNP Power Transistors

2SA743 2SA743A

DESCRIPTION

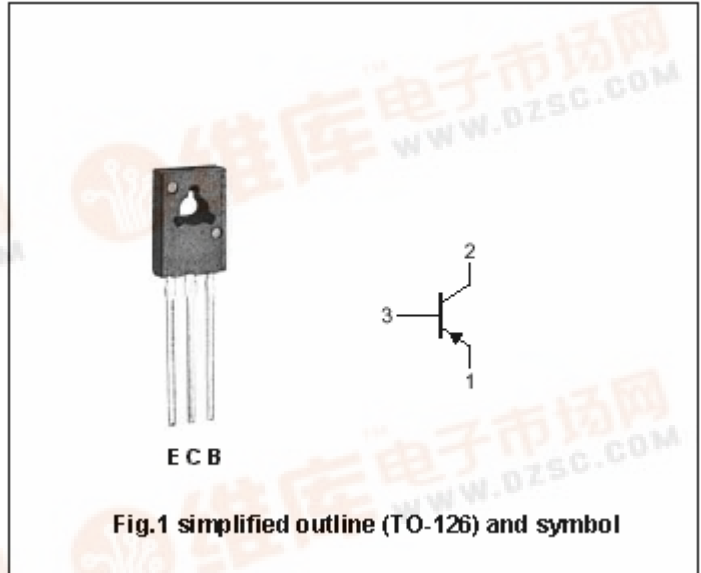
- With TO-126 package
- Complement to type 2SC1212/1212A

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°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2SA743	-50	V
		2SA743A	-80	
V _{CEO}	Collector- emitter voltage	2SA743	-50	V
		2SA743A	-80	
V _{EBO}	Emitter-base voltage	Open collector	-4	V
I _C	Collector current		-1	A
P _C	Collector power dissipation	T _a =25°C	0.75	W
		T _C =25°C	8	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55°C+150	°C

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SA743	I _C =-10mA ; R _{BE} =∞	-50			V
		2SA743A		-80			
V _{(BR)CBO}	Collector-base breakdown voltage	2SA743	I _C =-1mA ; I _E =0	-50			V
		2SA743A		-80			
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA ; I _C =0	-4			V	
V _{CEsat}	Collector-emitter saturation voltage	I _C =-1A ; I _B =-0.1A		-0.75	-1.5	V	
V _{BE}	Base-emitter voltage	I _C =-50mA ; V _{CE} =-4V		-0.65	-1.0	V	
I _{CER}	Collector cut-off current	2SA743	V _{CE} =-50V ; R _{BE} =1kΩ			-20	μA
		2SA743A	V _{CE} =-80V ; R _{BE} =1kΩ			-20	μA
h _{FE-1}	DC current gain	I _C =-50mA ; V _{CE} =-4V	60		200		
h _{FE-2}	DC current gain	I _C =-1A ; V _{CE} =-4V	20				
f _T	Transition frequency	I _C =-30mA ; V _{CE} =-4V		120		MHz	

◆ h_{FE-1} Classifications

B	C
60-120	100-200

PACKAGE OUTLINE

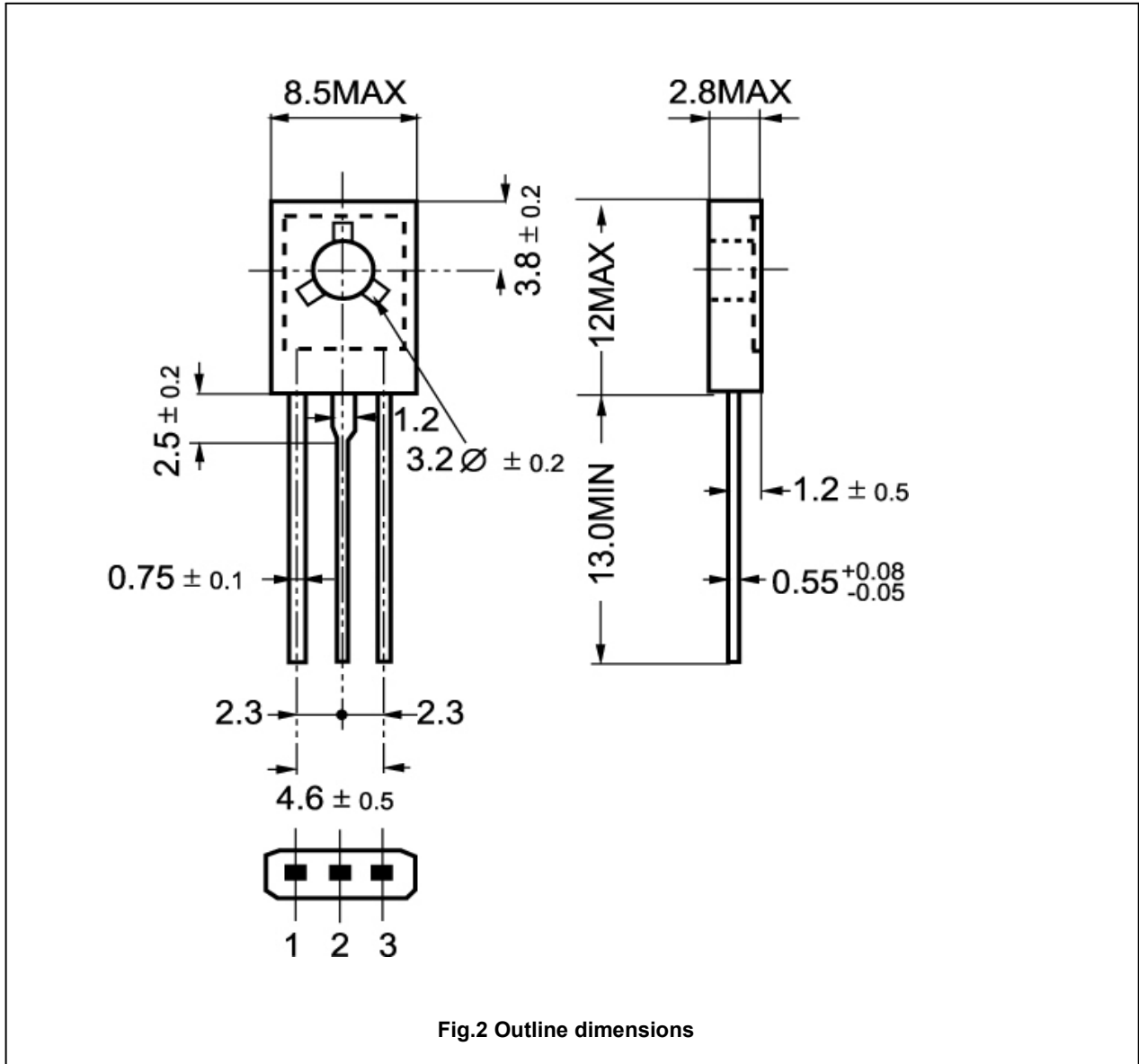


Fig.2 Outline dimensions

Silicon PNP Power Transistors

2SA743 2SA743A

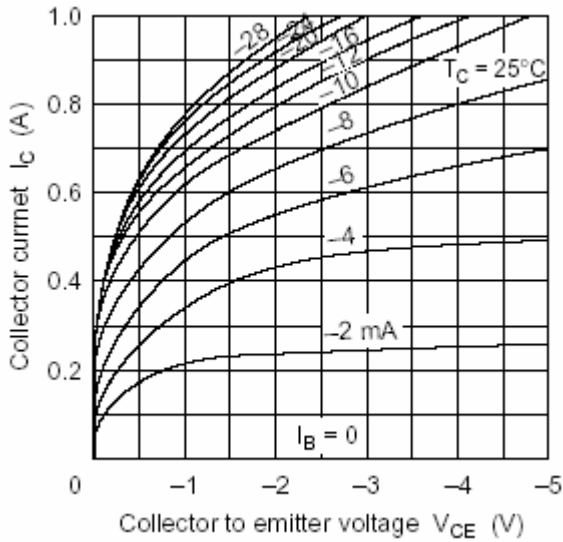


Fig.3 Static Characteristic

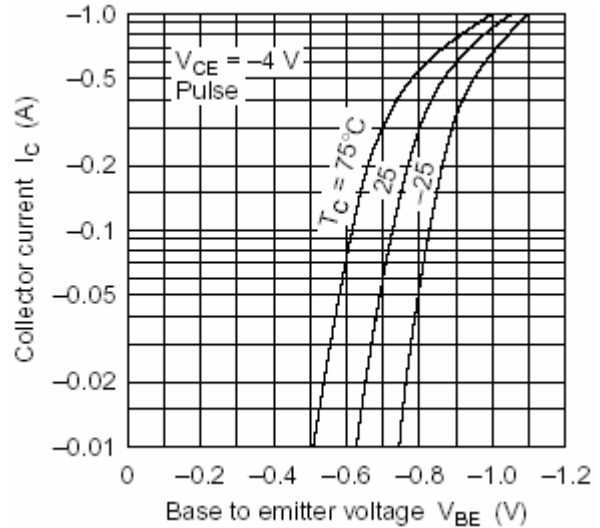


Fig.4 Base-Emitter On Voltage

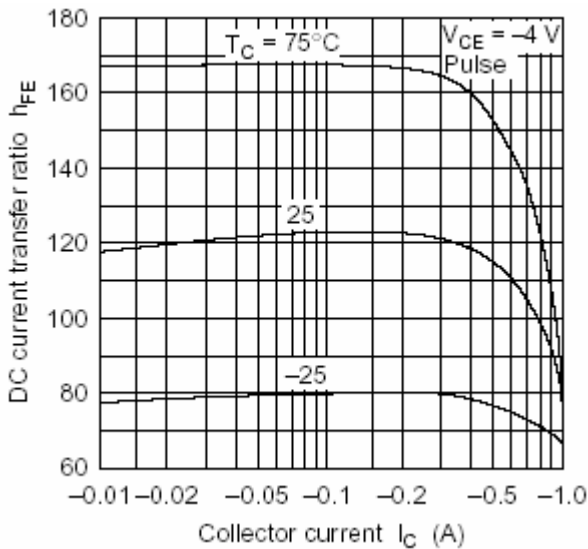


Fig.5 DC current Gain

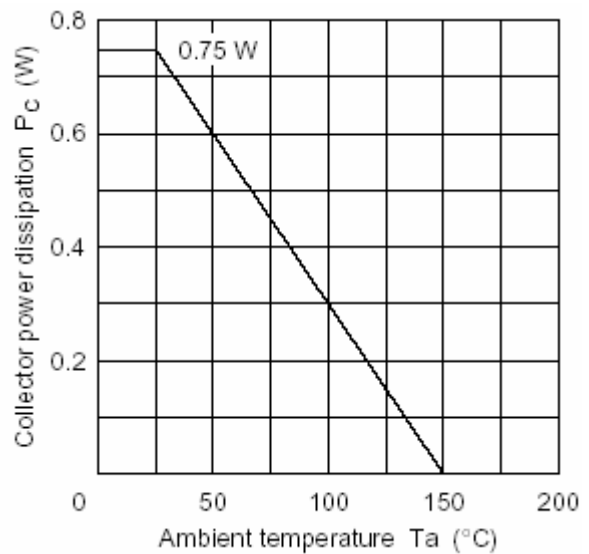


Fig.6 Power Derating

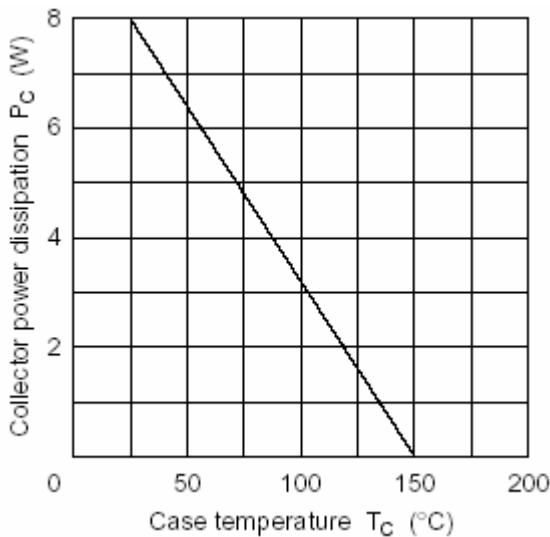


Fig.7 Power Derating