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

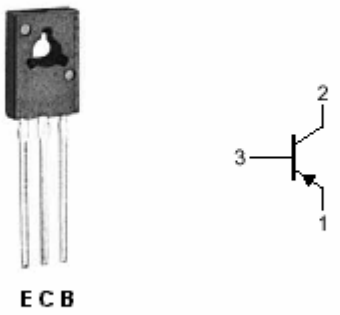

Fig.1 simplified outline (TO-126) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SA743	Open emitter	-50	V
		2SA743A		-80	
V_{CEO}	Collector- emitter voltage	2SA743	Open base	-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□	0.75	W
			T_C=25□	8	
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	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

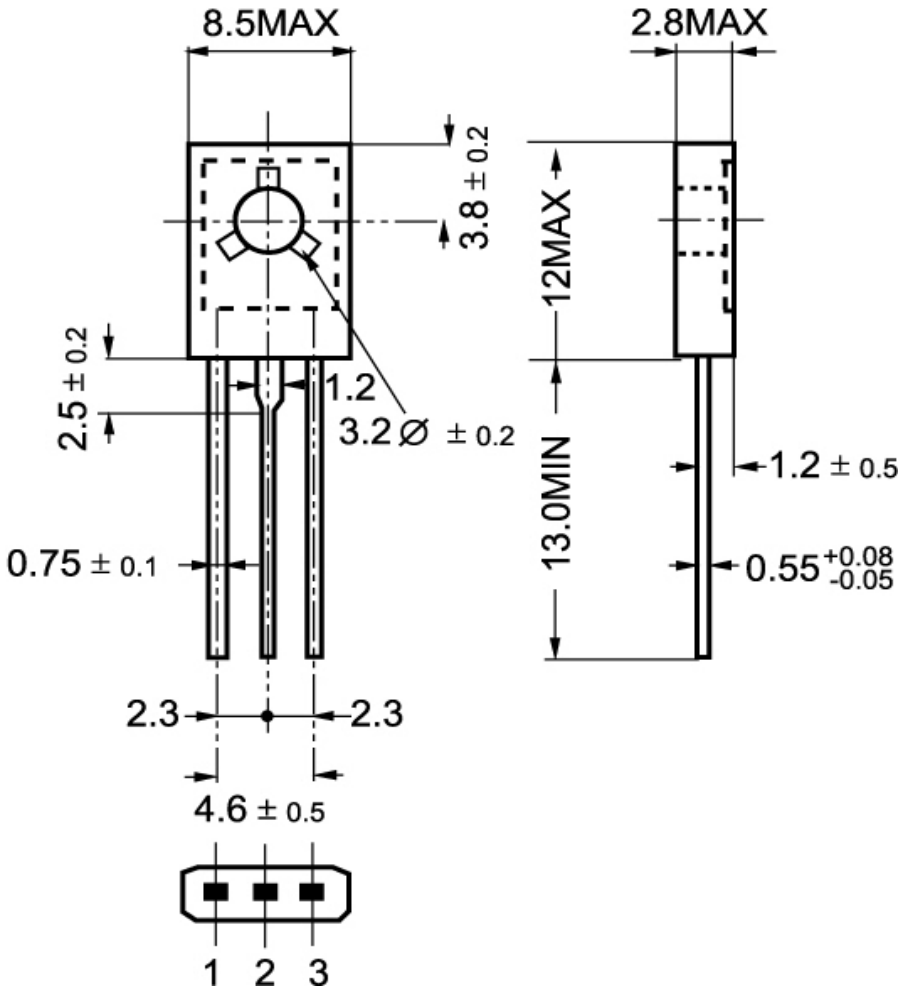

Fig.2 Outline dimensions

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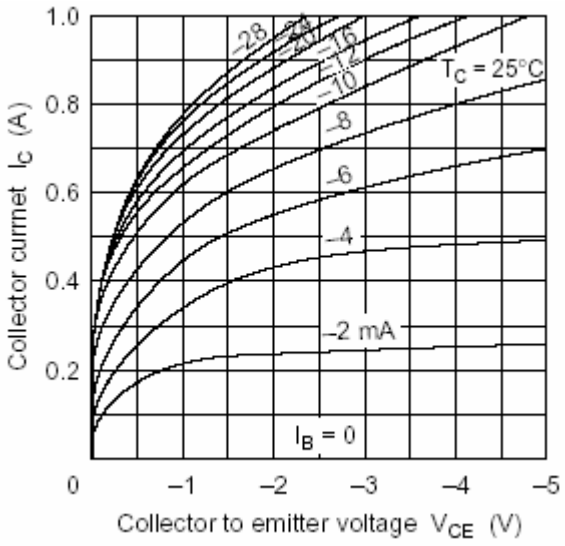

Fig.3 Static Characteristic

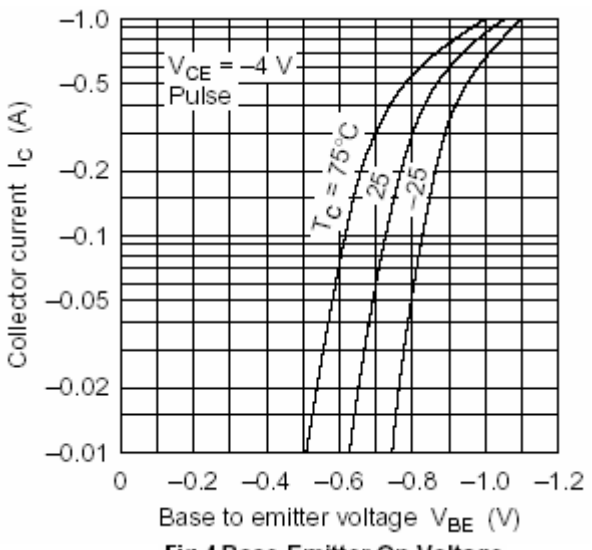

Fig.4 Base-Emitter On Voltage

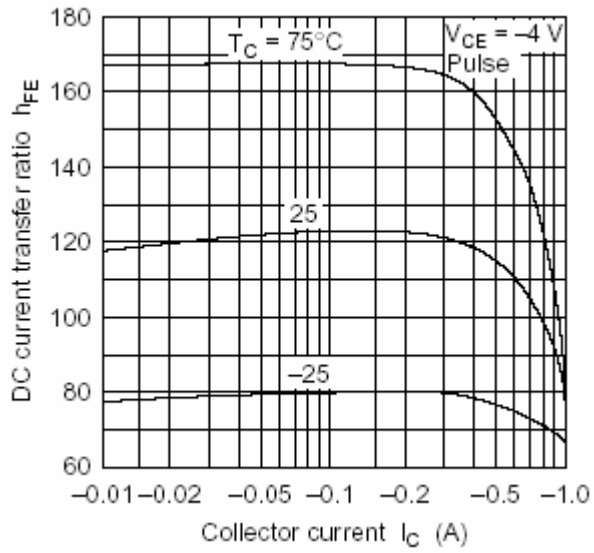

Fig.5 DC current Gain

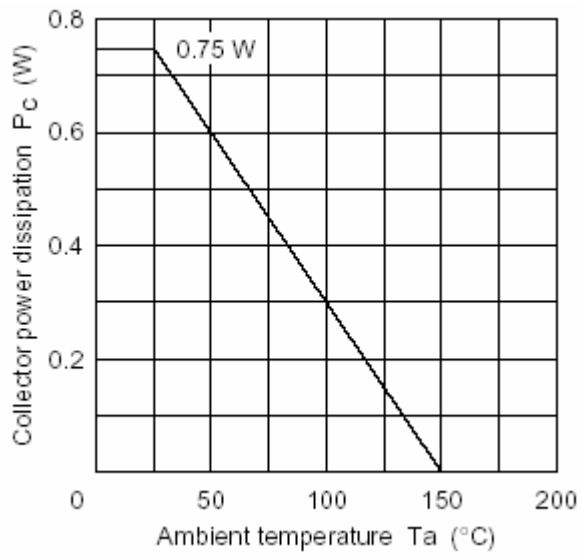

Fig.6 Power Derating

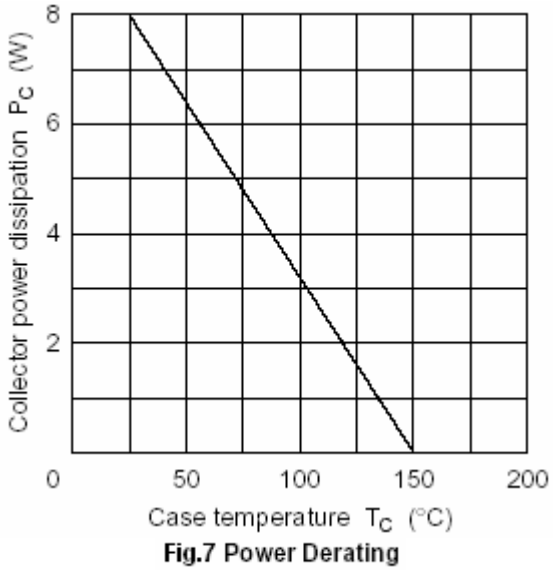

Fig.7 Power Derating