

Silicon NPN Power Transistors

2SC1212 2SC1212A

DESCRIPTION

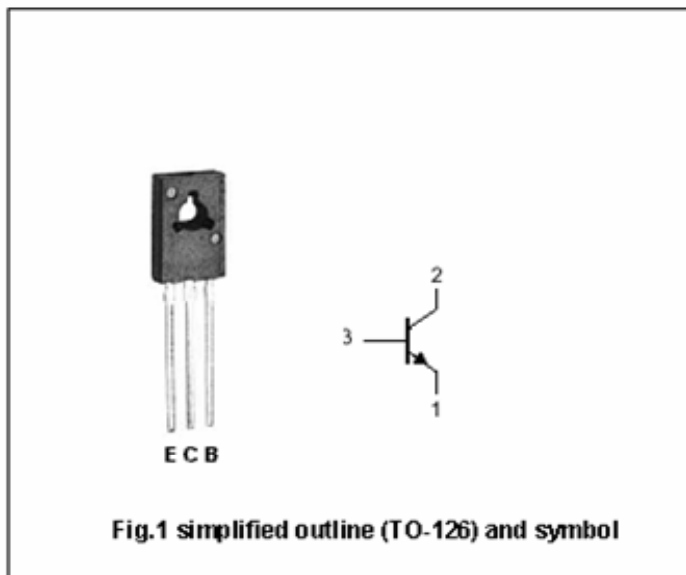
- With TO-126 package
- Complement to type 2SA743/743A

APPLICATIONS

- For low frequency power amplifier applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC1212	Open emitter	50	V
		2SC1212A		80	
V_{CEO}	Collector- emitter voltage	2SC1212	Open base	50	V
		2SC1212A		80	
V_{EBO}	Emitter-base voltage		Open collector	4	V
I_C	Collector current			1	A
P_D	Total power dissipation	$T_a=25$		0.75	W
		$T_c=25$		8	
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-55 ~ +150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SC1212	I _C =10mA ; R _{BE} =∞	50			V
		2SC1212A		80			
V _{(BR)CBO}	Collector-base breakdown voltage	2SC1212	I _C =1mA ; I _E =0	50			V
		2SC1212A		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			1.5	V
V _{BE}	Base-emitter voltage		I _C =50mA ; V _{CE} =4V			1.0	V
I _{CBO}	Collector cut-off current		V _{CB} =50V ; I _E =0			5	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		160		MHz

◆ h_{FE-1} Classifications

B	C
60-120	100-200

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PACKAGE OUTLINE

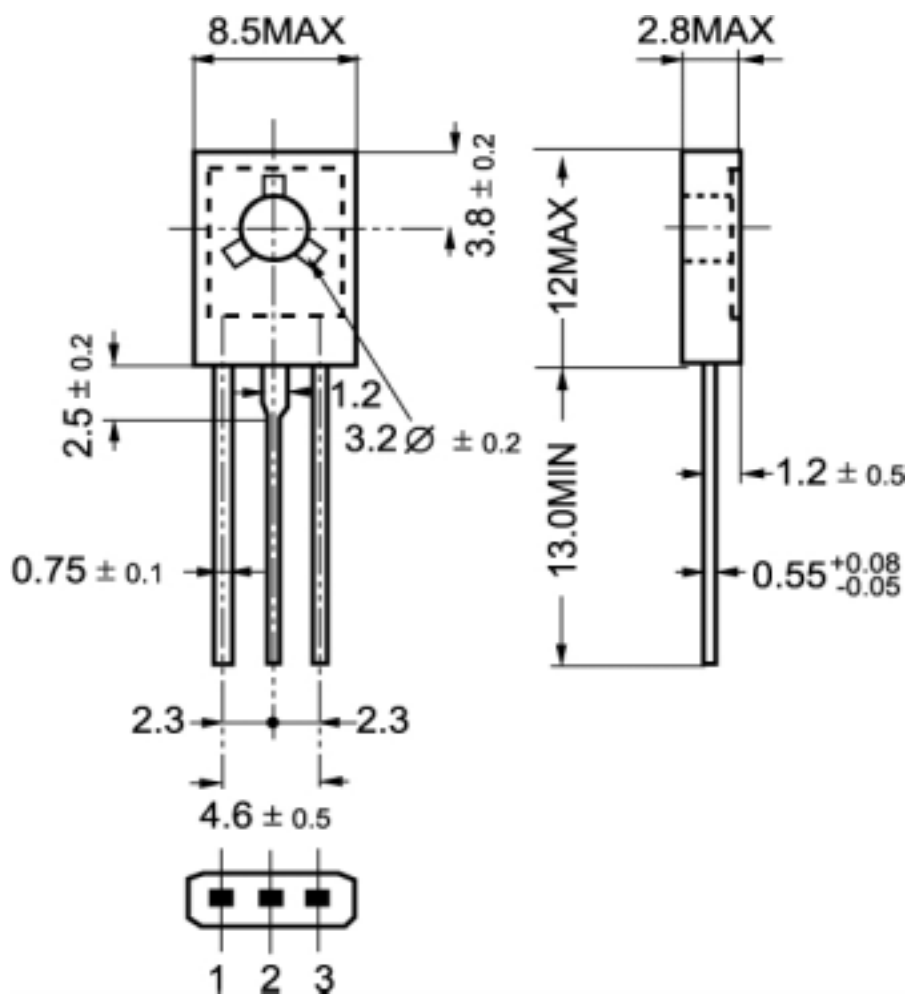


Fig.2 Outline dimensions

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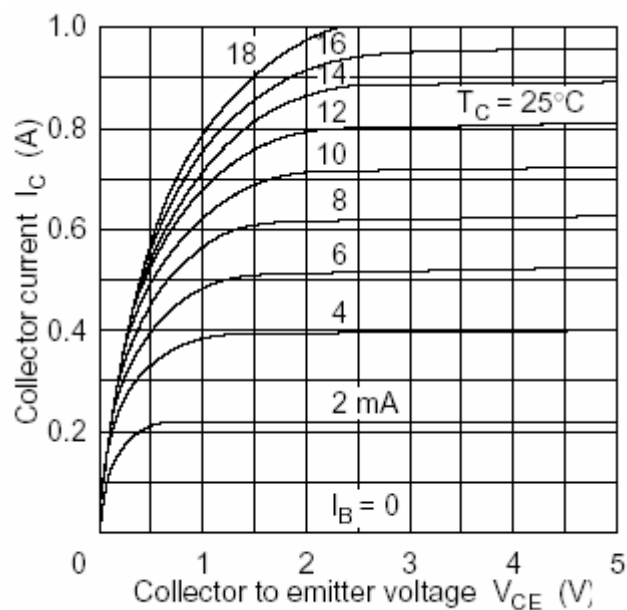


Fig.3 Static Characteristic

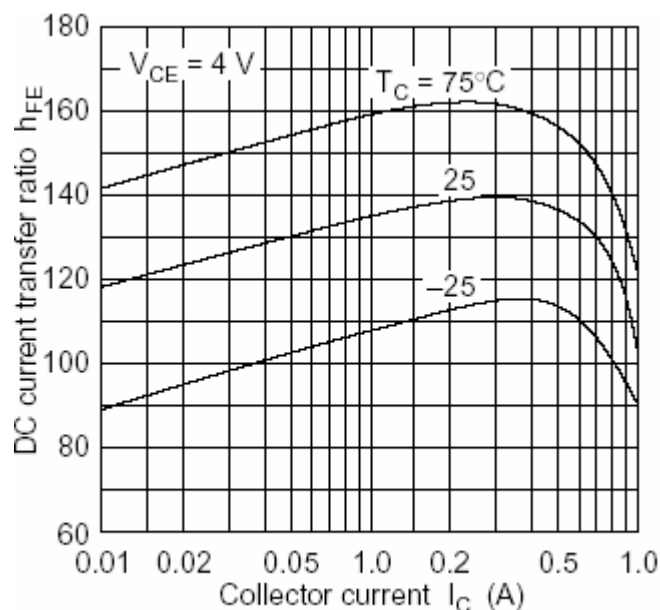


Fig.4 DC current Gain

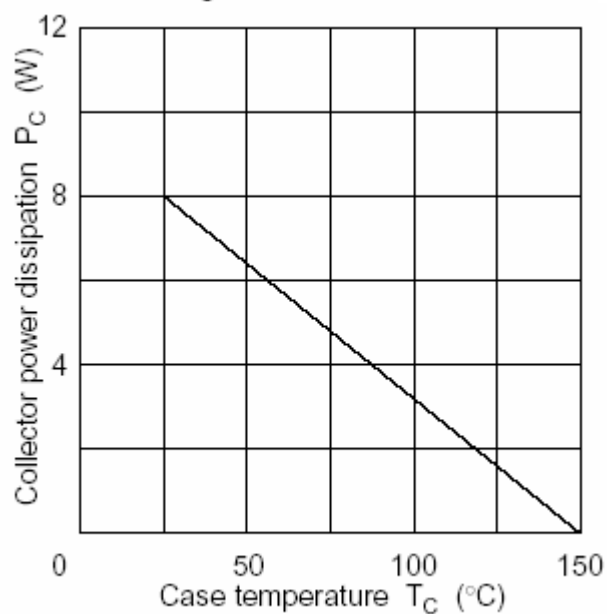


Fig.5 Power Derating