

Silicon NPN Power Transistors

2SC1212 2SC1212A

DESCRIPTION

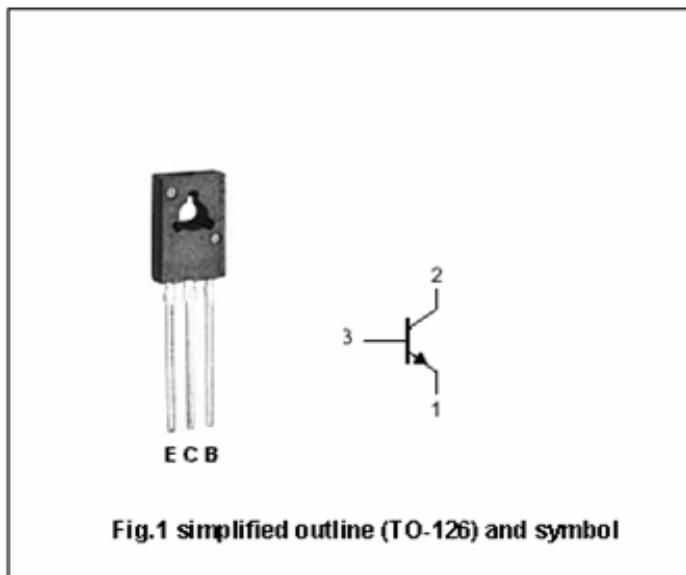
- With TO-126 package
- Complement to type 2SA743/743A

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

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	2SC1212	$I_C=10mA ; R_{BE}=\infty$	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

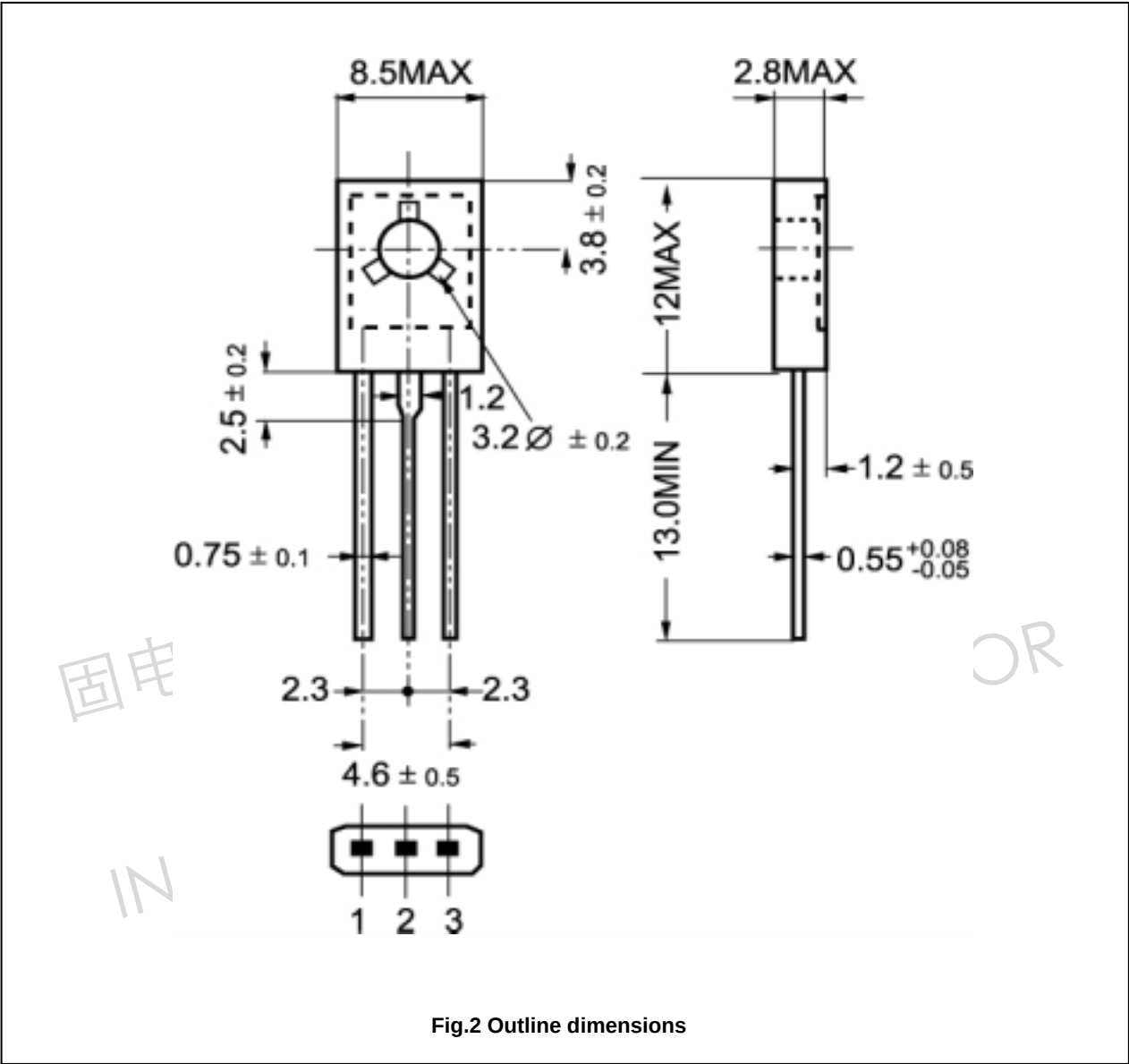


Fig.2 Outline dimensions

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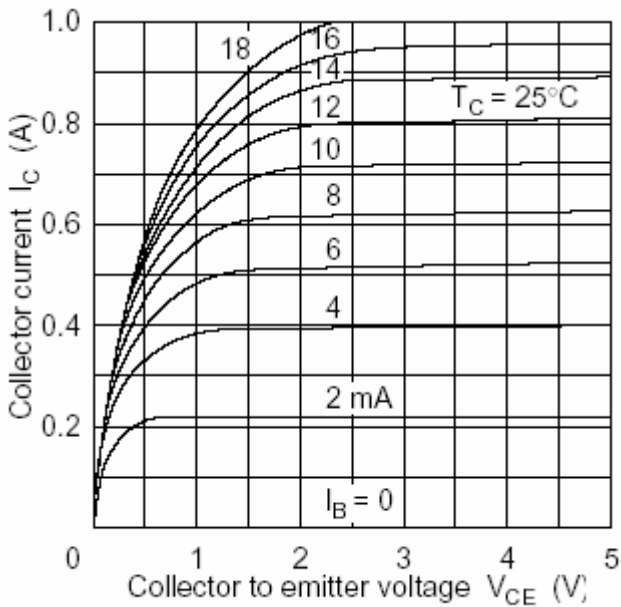


Fig.3 Static Characteristic

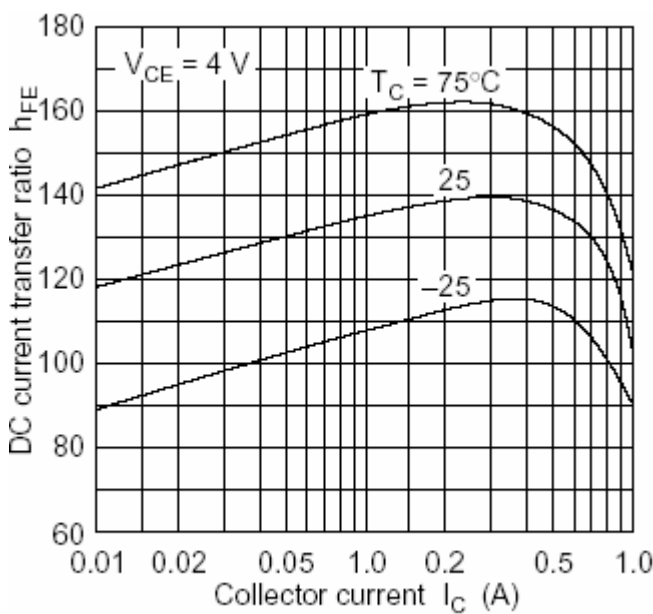


Fig.4 DC current Gain

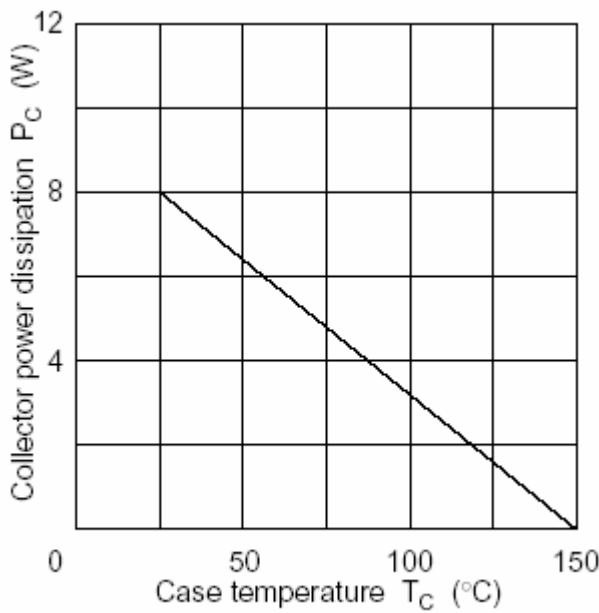


Fig.5 Power Derating