

**Silicon PNP Power Transistors**

**2SA715**

**DESCRIPTION**

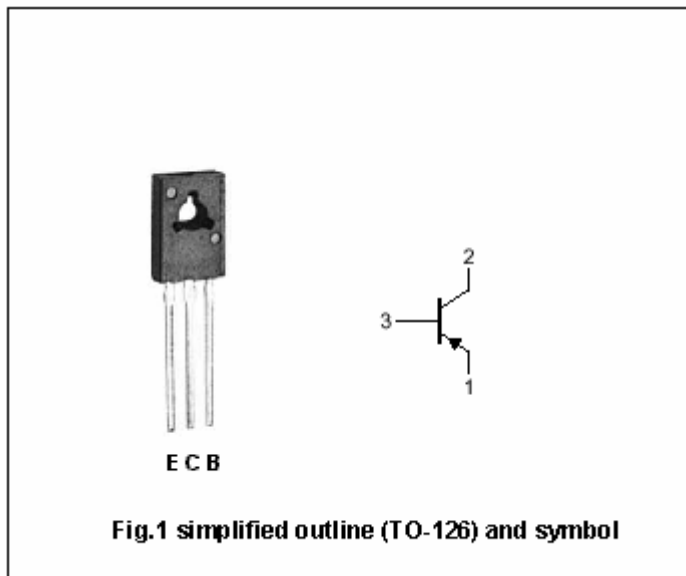
- With TO-126 package
- Complement to type 2SC1162

**APPLICATIONS**

- Low frequency power amplifier applications

**PINNING**

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



**Absolute Maximun Ratings (Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-35	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-35	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current (DC)		-2.5	A
I <sub>CM</sub>	Collector current-Peak		-3	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25°C	0.75	W
		T <sub>C</sub> =25°C	10	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-10mA; R <sub>BE</sub> =∞	-35			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-1mA ; I <sub>E</sub> =0	-35			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA ; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2.0A ; I <sub>B</sub> =-0.2A(Pulse test)		-0.5	-1.0	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-1.5A ; V <sub>CE</sub> =-2V(Pulse test)		-1.0	-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-35V ; I <sub>E</sub> =0			-20	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-2V	60		320	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-1.5A ; V <sub>CE</sub> =-2V(Pulse test)	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.2A ; V <sub>CE</sub> =-2V(Pulse test)		160		MHz

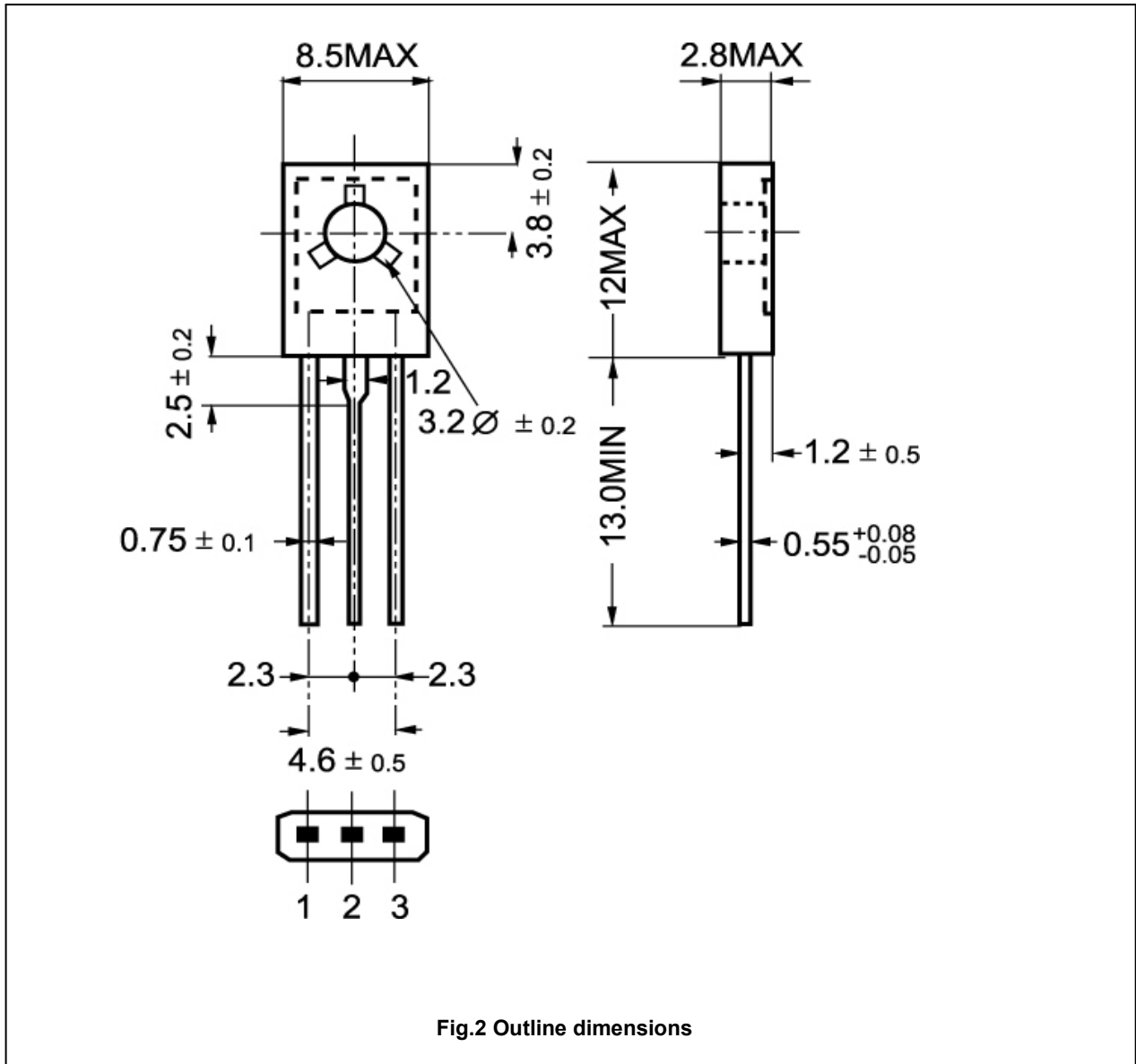
◆ h<sub>FE-1</sub> Classifications

B	C	D
60-120	100-200	160-320

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PACKAGE OUTLINE



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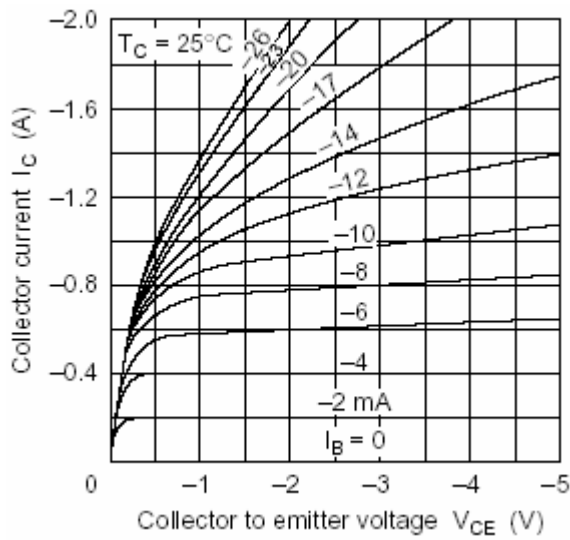


Fig.3 Static Characteristic

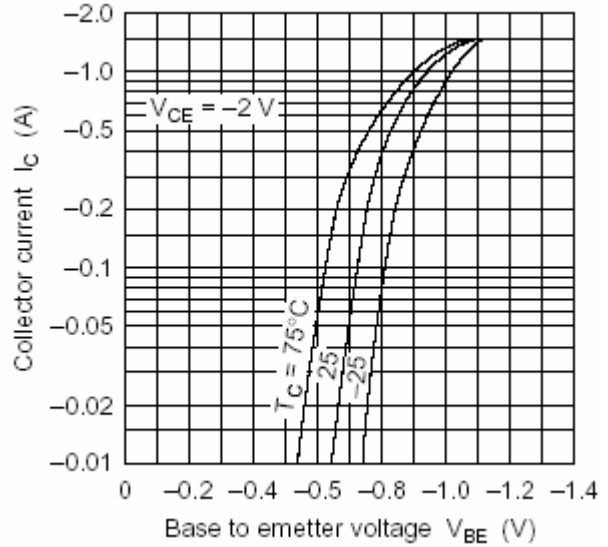


Fig.4 Base-Emitter On Voltage

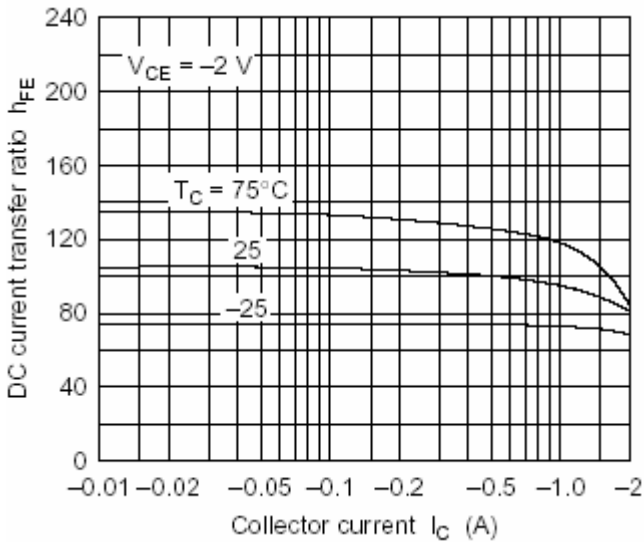


Fig.5 DC current Gain

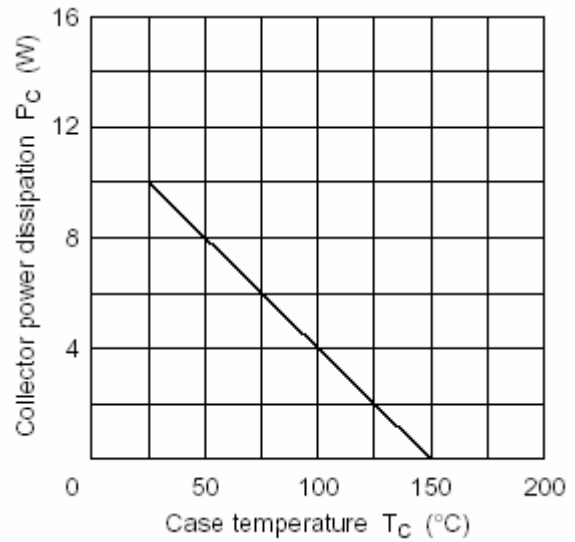


Fig.6 Power Derating

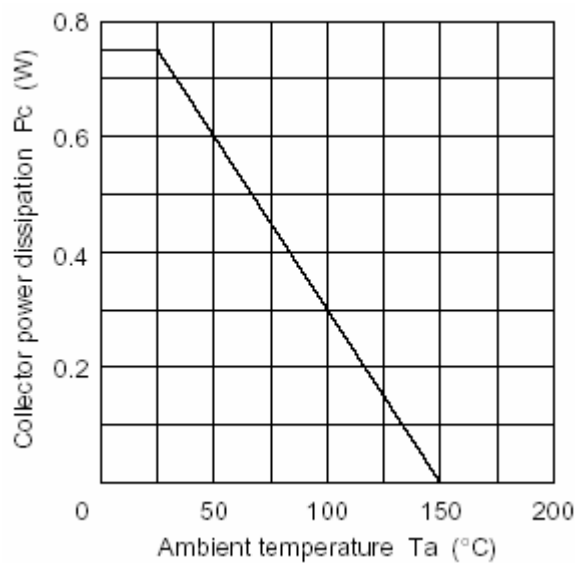


Fig.7 Power Derating

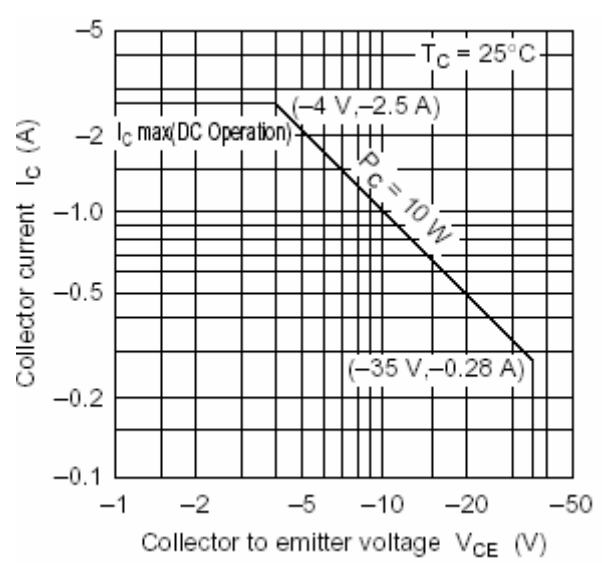


Fig.8 Safe Operating Area