

# **F<sub>GX</sub>** 《风光欣》 技术资料

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## 2SC3199

NPN SILICON TRANSISTOR

### FEATURES

Power dissipation

P<sub>CM</sub>: 400 mW (T<sub>amb</sub>=25°C)

Collector current

I<sub>CM</sub>: 150 mA

Collector-base voltage

V<sub>(BR)CBO</sub>: 50 V

Operating and storage junction temperature range

T<sub>J</sub>, T<sub>stg</sub>: -55°C to +150°C

### TO-92S

1. Emitter

2. Collector

3. Base



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### ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =2mA	70		700	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA		0.1	0.25	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1mA	80			MHz
Collector output capacitance	C <sub>OB</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		2.0	3.5	pF
Noise figure	NF	V <sub>CE</sub> =6V, I <sub>C</sub> =0.1mA, f=1KHZ, R <sub>g</sub> =10KΩ		1.0	10	dB
h <sub>FE</sub> Linearity		h <sub>FE</sub> (0.1mA)/h <sub>FE</sub> (2mA)		0.95		

### CLASSIFICATION OF h<sub>FE(1)</sub>

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	300-700