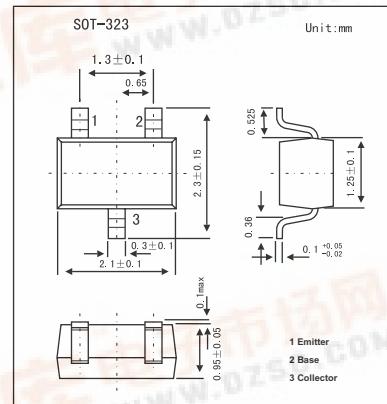


## SMD Type

## Transistors

# Medium Power Amplifier

## 2SA1979UF

**■ Features**

- Large collector current.
- Suitable for low-Voltage operation because of its low saturation voltage.

**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	-40	V
Collector-emitter voltage	V <sub>C EO</sub>	-32	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	I <sub>C</sub>	-500	mA
Collector dissipation	P <sub>C</sub>	200	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

**■ Electrical Characteristics Ta = 25°C**

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV <sub>CBO</sub>	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-40			V
Collector-emitter breakdown voltage	BV <sub>C EO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-32			V
Emitter-base breakdown voltage	BV <sub>EBO</sub>	I <sub>E</sub> =-10μA, I <sub>C</sub> =0	-5			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> =-40V, I <sub>E</sub> =0			-0.1	μA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-0.1	μA
DC current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	70		240	
Collector-emitter saturation voltage	V <sub>C E(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-0.25	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-20mA		200		MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-6V, I <sub>E</sub> =0, f=1MHz		7.5		pF

**■ hFE Classification**

Marking	A	
Rank	O	Y
hFE	70~140	120~240