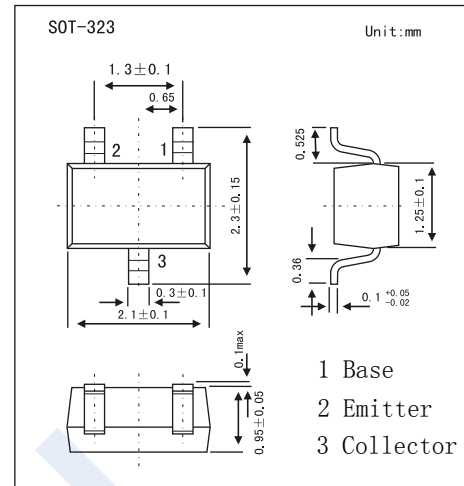


## PNP Transistors

### 2SA1979UF

#### ■ Features

- Large collector current :  
I<sub>CMax</sub>=-500mA
- Complements to 2SC5342UF



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-40	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-32	
Emitter - Base Voltage	V <sub>EBO</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-500	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = -100 μA, I <sub>E</sub> =0	-40			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -1 mA, I <sub>B</sub> = 0	-32			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>C</sub> =0	-5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -40V, 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	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-0.25	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -100mA	70		240	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -6V, I <sub>E</sub> = 0, f=1MHz		7.5		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -20mA		200		MHz

#### ■ Classification of h<sub>FE</sub>

Type	2SA1979UF-O	2SA1979UF-Y
Range	70-140	120-240
Marking	AO	AY

# PNP Transistors

## 2SA1979UF

■ Typical Characteristics

Fig. 1  $P_C - T_a$

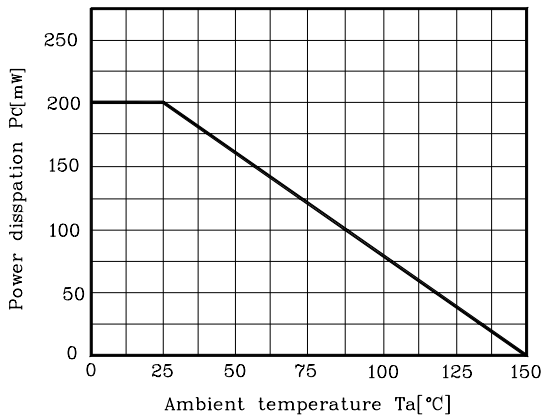


Fig. 2  $I_C - V_{BE}$

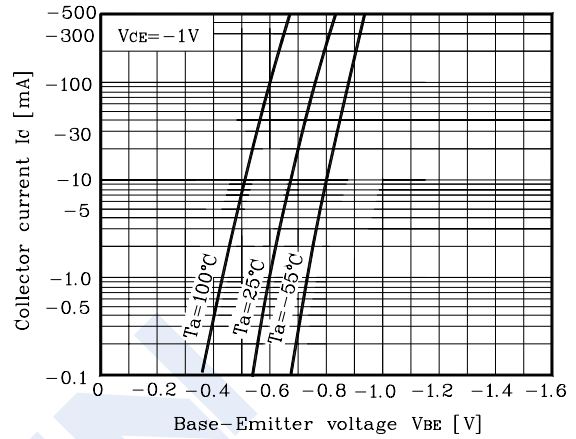


Fig. 3  $I_C - V_{CE}$

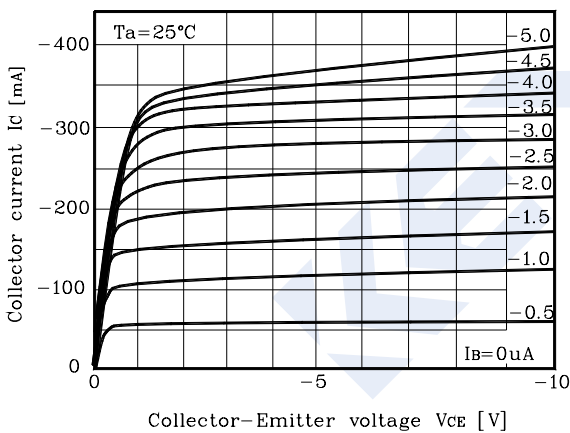


Fig. 4  $V_{CE(sat)} - I_C$

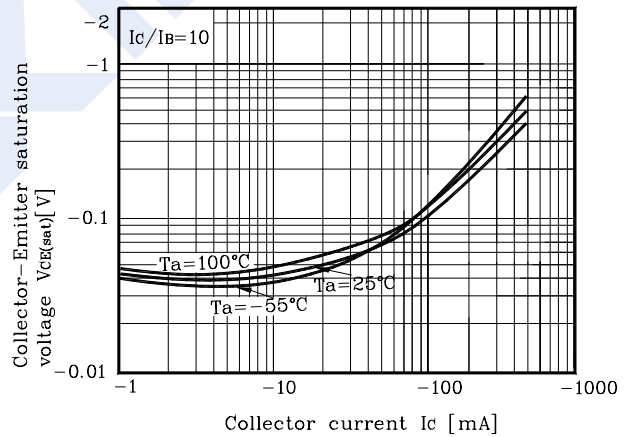


Fig. 5  $h_{FE} - I_C$

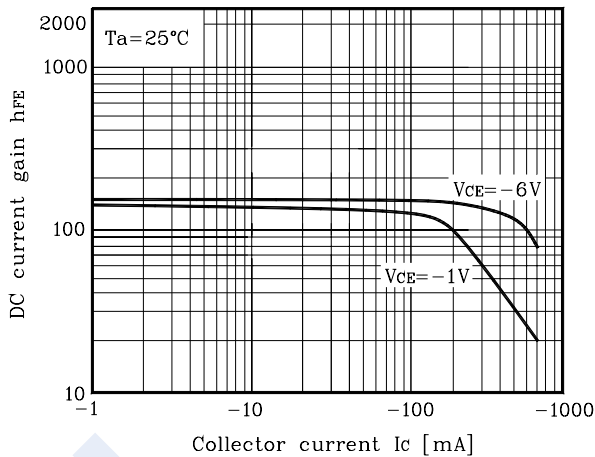


Fig. 6  $h_{FE} - I_C$

