

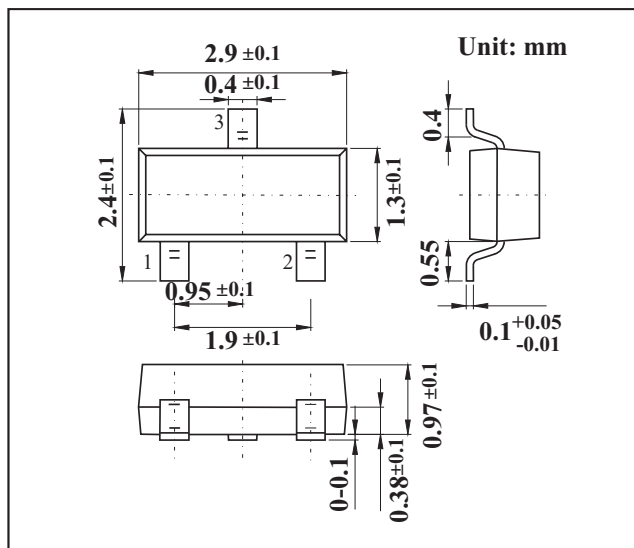
SOT-23 Plastic-Encapsulate Transistors

Features

- Excellent hFE linearity
- Collector Current :Ic=-0.5A
- PNP Transistors

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-40	V
Collector - Emitter Voltage	V _{CEO}	-25	V
Emitter - Base Voltage	V _{EB0}	-5	V
Collector Current to Continuous	I _C	-500	mA
Collector Power Dissipation	P _C	300	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to 150	°C

PACKAGE INFORMATION

Device	Package	Shipping
S9012	SOT-23	3000/Tape&

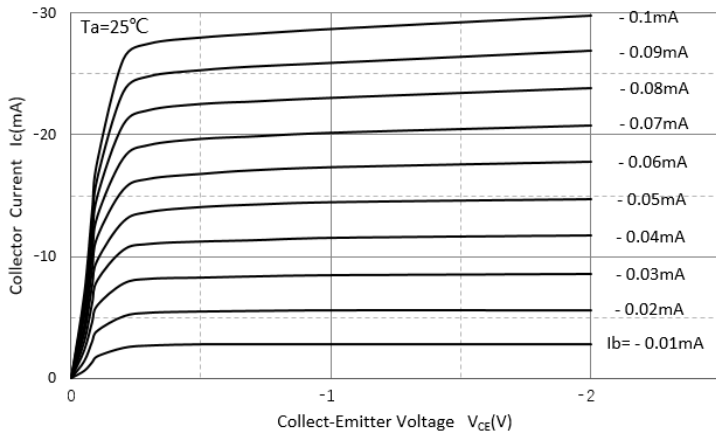
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector - base breakdown voltage	V _{CB0}	I _C = -100u A, I _E =0	-40			V
Collector - emitter breakdown voltage	V _{CEO}	I _C = -1 mA, I _B =0	-25			V
Emitter - base breakdown voltage	V _{EB0}	I _E = -100uA, I _C =0	-5			V
Collector cut - off current	I _{CB0}	V _{CB} =- 40V, I _E =0			-0.1	μ A
Collector cut - off current	I _{CEO}	V _{CB} =-20V, I _E =0			-1	μ A
Emitter cut - off current	I _{EB0}	V _{EB} =- 5V, I _C =0			-0.1	μ A
DC current gain	h _{FE}	V _{CE} =-1V, I _C = -50mA	120		400	
Collector - emitter saturation voltage	V _{CE(sat)}	I _C = -500 mA, I _B = -50mA			-0.6	V
Base - emitter voltage	V _{BE(sat)}	I _C = -500 mA, I _B =- 50mA			-1.2	V
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			5	pF
Transition frequency	f _T	V _{CE} =-6V, I _C =-20mA, f=30MHz	150			MHz

Classification of h_{FE}(1)

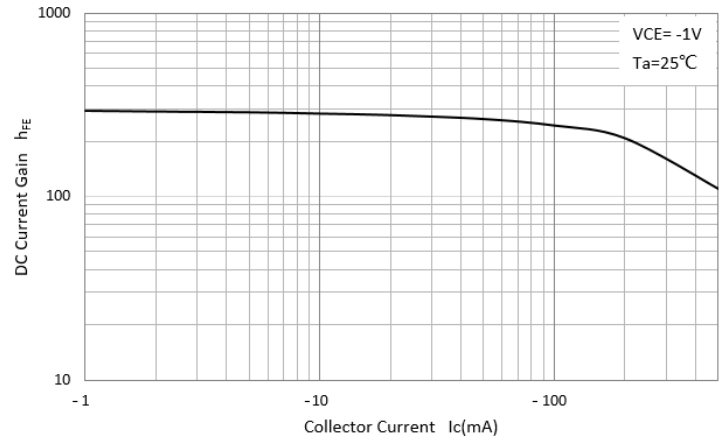
Type	S9012	S9012-L	S9012-H	S9012-J
Range	200-350	120-200	144-202	300-400
Marking	2T1			

RATINGS AND CHARACTERISTIC CURVES

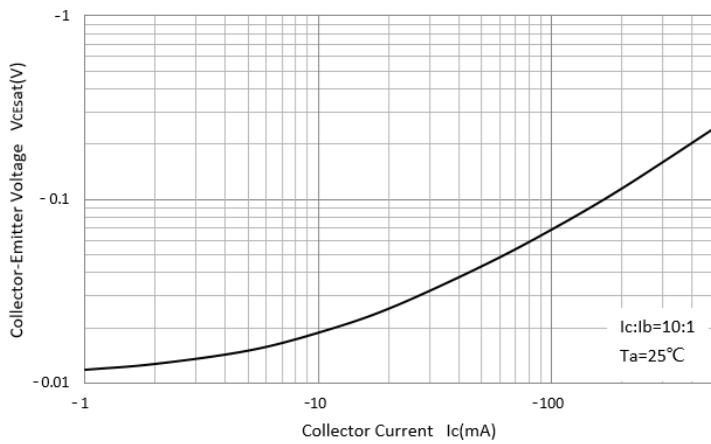
Static Characteristic



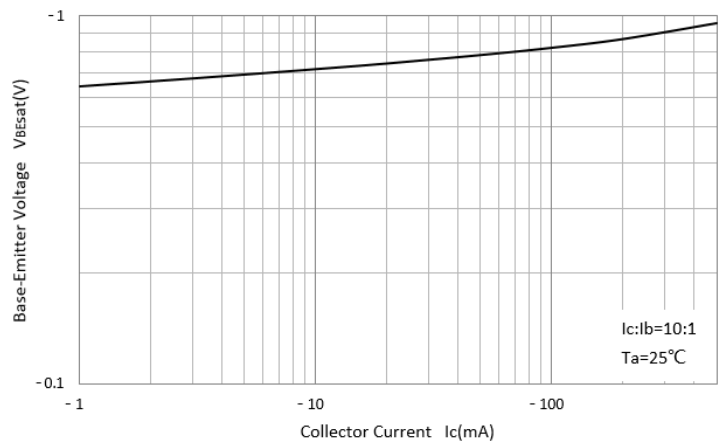
DC Current Gain



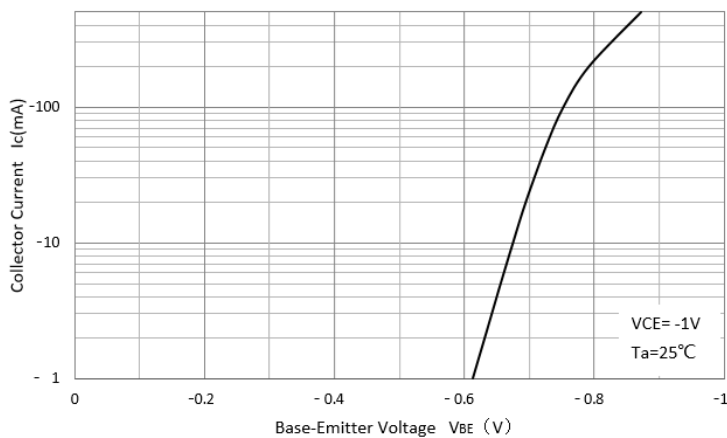
Collector-Emmitter Saturation Voltage



Base-Emmitter Saturation Voltage



Base-Emmitter On Voltage



$C_{ob}/C_{ib}-V_{CB}/V_{EB}$

