



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

S9014 TRANSISTOR (NPN)

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

FEATURES

- Complementary to S9015

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

MARKING: J6

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	45	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	0.1	A
P _C	Collector Power Dissipation	0.2	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

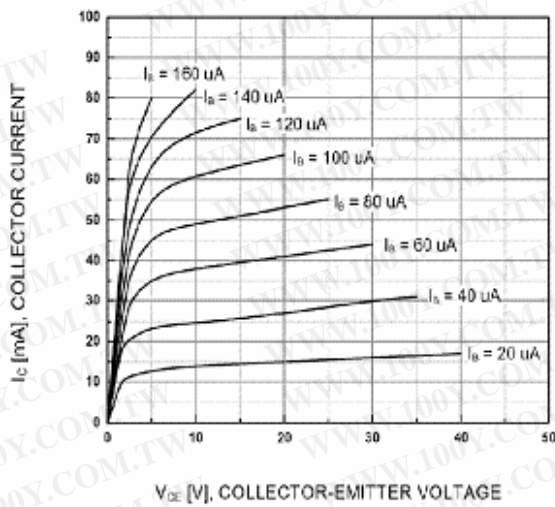
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 0.1mA, I _B =0	45			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =50 V, I _E =0			0.1	μ A
Collector cut-off current	I _{CEO}	V _{CE} =35V, I _B =0			0.1	μ A
Emitter cut-off current	I _{EBO}	V _{EB} = 3V, I _C =0			0.1	μ A
DC current gain	h _{FE}	V _{CE} =5V, I _C = 1mA	200		1000	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100 mA, I _B = 5mA			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =100 mA, I _B = 5mA			1	V
Transition frequency	f _T	V _{CE} =5V, I _C = 10mA f=30MHz	150			MHz

CLASSIFICATION OF h_{FE}

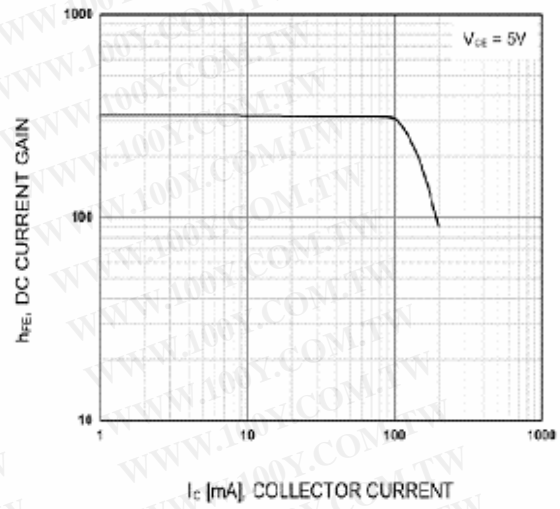
Rank	L	H
Range	200-450	450-1000

Typical Characteristics

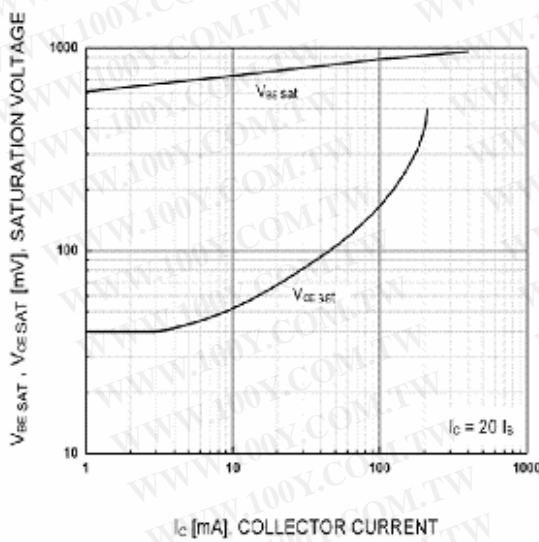
S9014



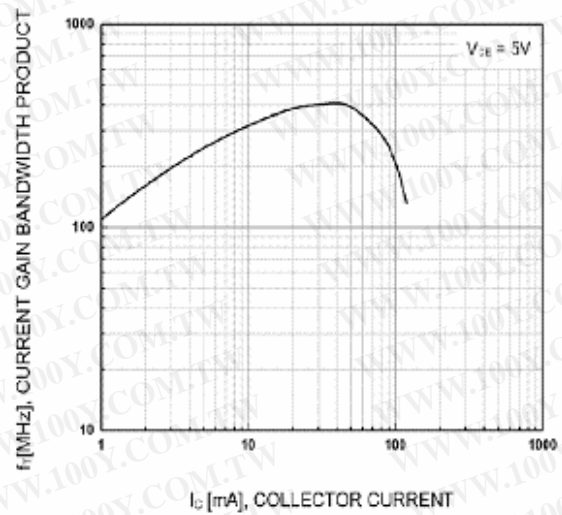
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product