



## FEATURES

Complimentary to S9014

## MARKING: M6

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-45	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current -Continuous	I <sub>C</sub>	-0.1	A
Collector Power Dissipation	P <sub>C</sub>	0.2	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>Stg</sub>	-55 to +150	°C

## S9015 (PNP)



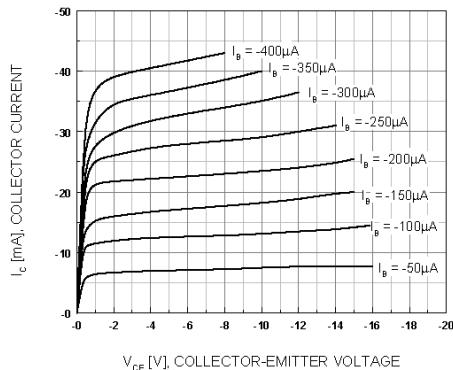
ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = -100μA, I <sub>E</sub> =0	-50			V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -0.1mA, I <sub>B</sub> =0	-45			V
Emitter-base breakdown voltage	V <sub>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> =-50 V, 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</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> = -1mA	200		1000	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> = -10mA			-0.3	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> = -10mA f=30MHz	150			MHz

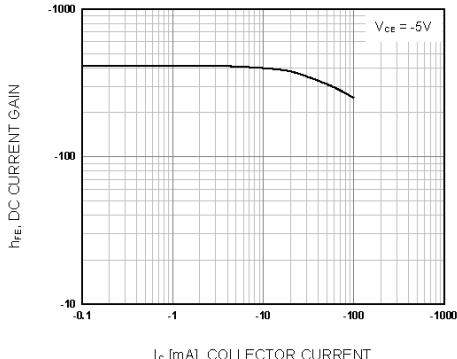
## CLASSIFICATION OF h<sub>FE</sub>

Rank	L	H
Range	200-450	450-1000

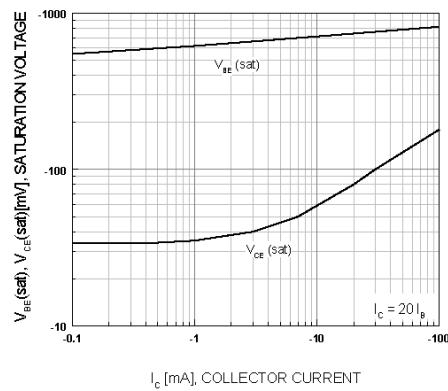
## S9015 Typical Characteristics



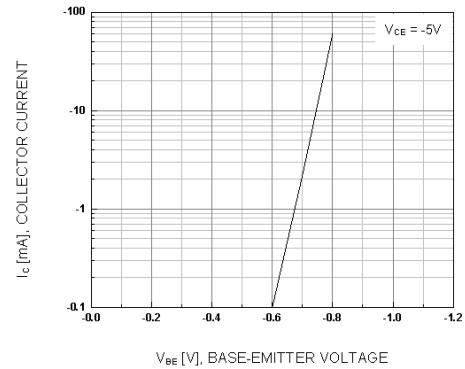
**Figure 1. Static Characteristic**



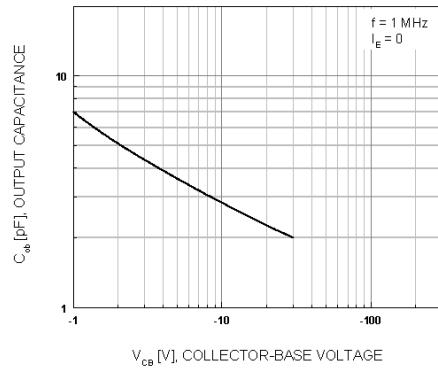
**Figure 2. DC current Gain**



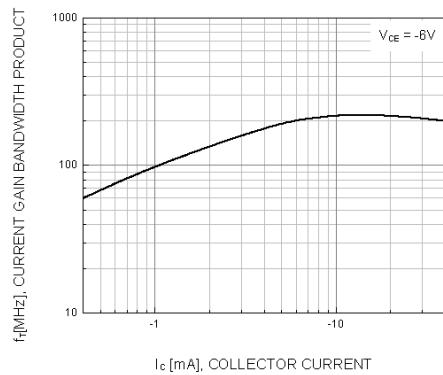
**Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Figure 4. Base-Emitter On Voltage**



**Figure 5. Collector Output Capacitance**



**Figure 6. Current Gain Bandwidth Product**