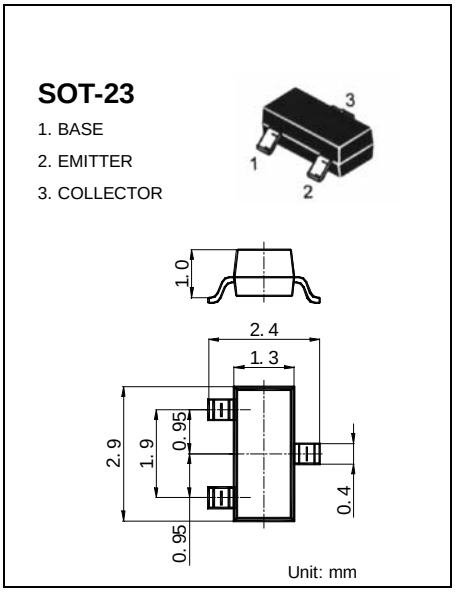
Shenzhen Tuofeng Semiconductor Technology Co., Ltd

SOT-23 Plastic-Encapsulate Transistors

S9015LT1 TRANSISTOR (PNP)



FEATURES

Power dissipation

$P_{CM:}$ 0.2 W (Tamb=25℃)

Collector current

$I_{CM:}$ -0.1 A

Collector-base voltage

$V_{(BR)CBO}$: -50 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic= -100μA, I_E=0	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic= -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}=-50V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-5V, I_C= -1mA	200		1000	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=-100mA, I_B= -10mA			-0.3	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=-100mA, I_B=-10mA			-1	V
Transition frequency	f_T	V_{CE}=-5V, I_C= -10mA f=30MHz	150			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	200-400	400-600

DEVICE MARKING	**S9015LT1=M6**

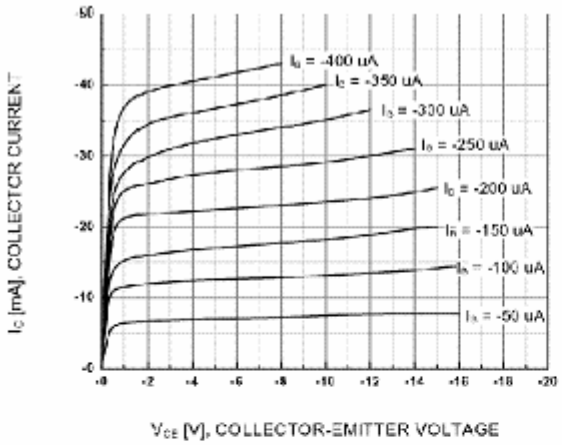


Figure 1. Static Characteristic

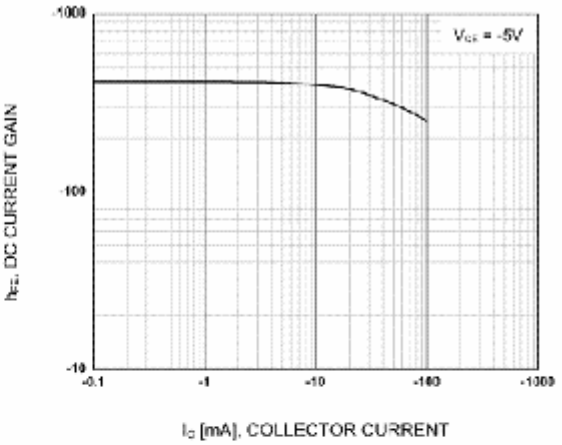


Figure 2. DC current Gain

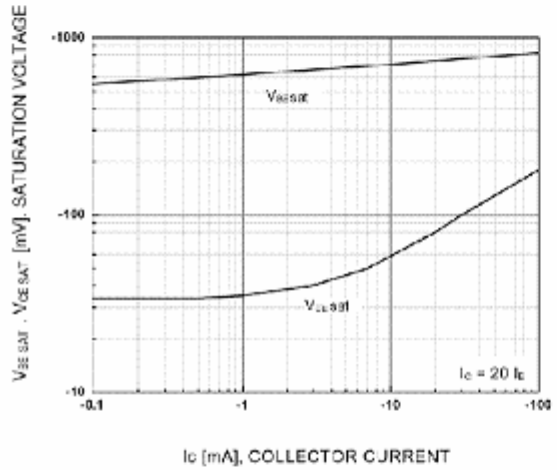


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

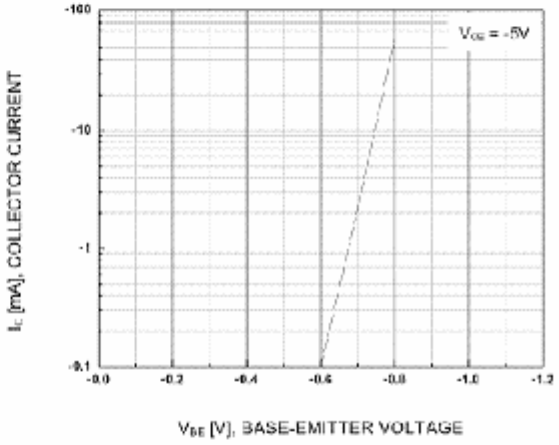


Figure 4. Base-Emitter On Voltage

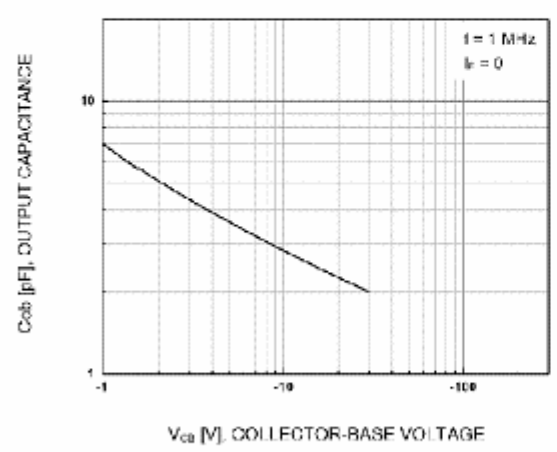


Figure 5. Collector Output Capacitance

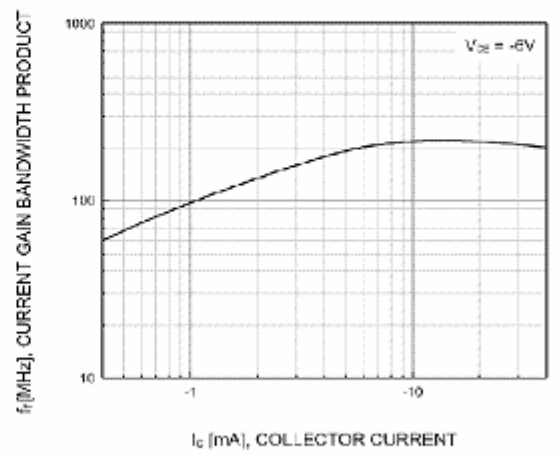


Figure 6. Current Gian Bandwidth Product