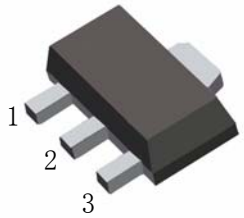
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT -89 Plastic-Encapsulate Transistors

D882 TRANSISTOR（ NPN ）

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER



FEATURES

Power dissipation

P_{CM} ： 0.75 W（Tamb=25℃）

MAXIMUM RATINGS* T_A=25℃ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Dissipation	0.75	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

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	40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	Ic= 10 mA, I_B=0	30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 100 μA, I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}= 40 V, I_E=0			1	μA
Collector cut-off current	I_{CEO}	V_{CE}= 30 V, I_B=0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 6 V, I_C=0			1	μA
DC current gain	$h_{FE（1）}$	V_{CE}= 2 V, I_C= 1A	60		400	
	$h_{FE（2）}$	V_{CE}= 2 V, I_C= 100mA	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 2A, I_B= 0.2 A			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 2A, I_B= 0.2 A			2	V
Transition frequency	f_T	V_{CE}= 5V , Ic=0.1A f =10MHz	50			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical characteristics D882

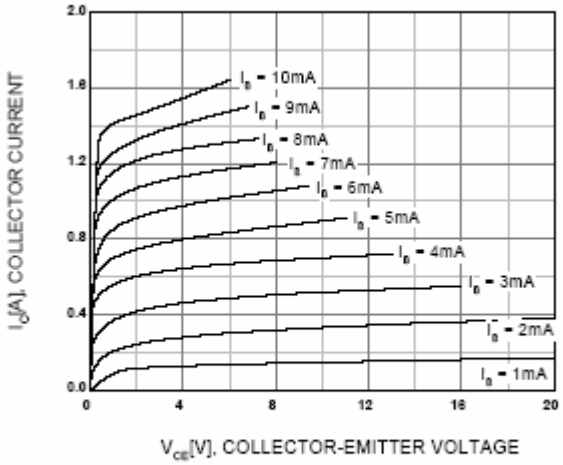


Figure 1. Static Characteristic

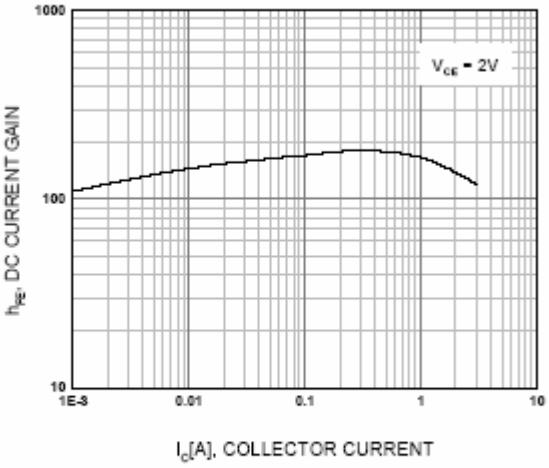


Figure 2. DC current Gain

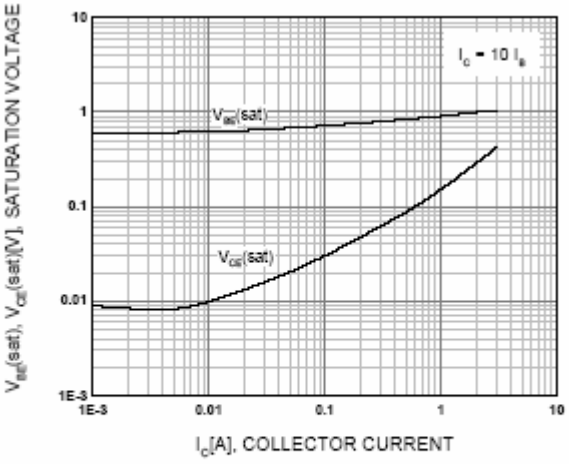


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

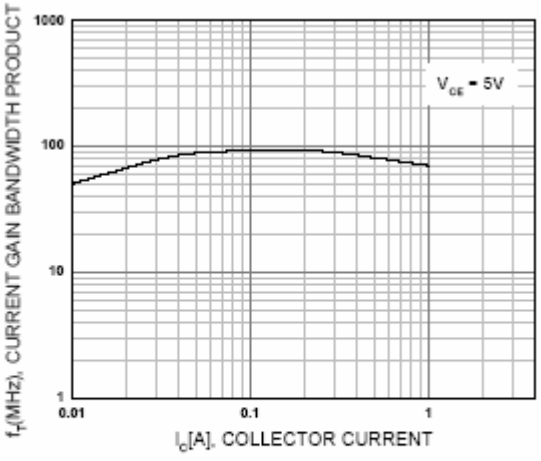


Figure 4. Current Gain Bandwidth Product

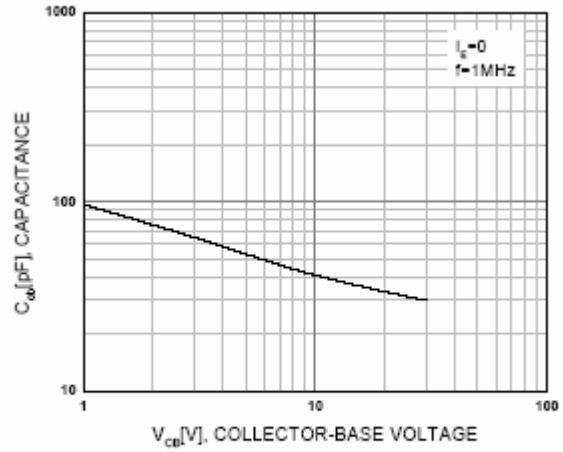


Figure 5. Collector Output Capacitance