



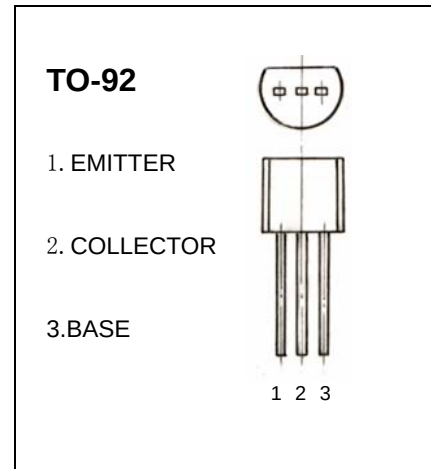
TO-92 Plastic-Encapsulate Transistors

D882 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.625 W ($T_{amb}=25^{\circ}C$)



MAXIMUM RATINGS* $T_A=25^{\circ}C$ 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	0.625	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55-150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

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

CLASSIFICATION OF $h_{FE(1)}$

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

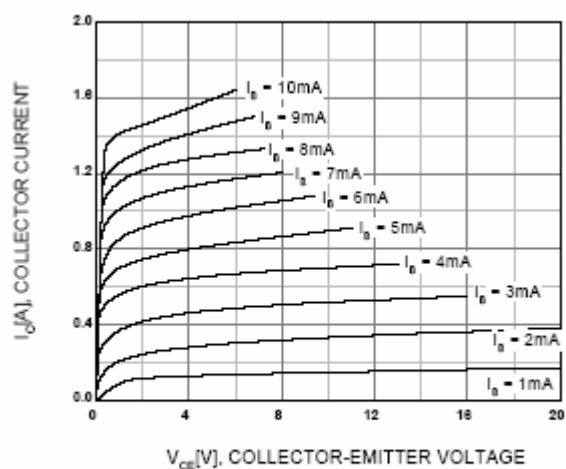


Figure 1. Static Characteristic

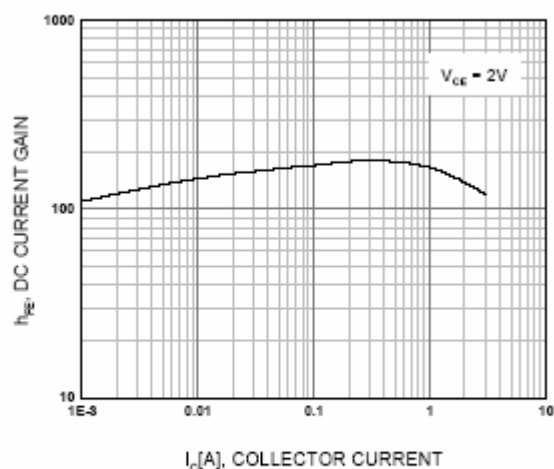


Figure 2. DC current Gain

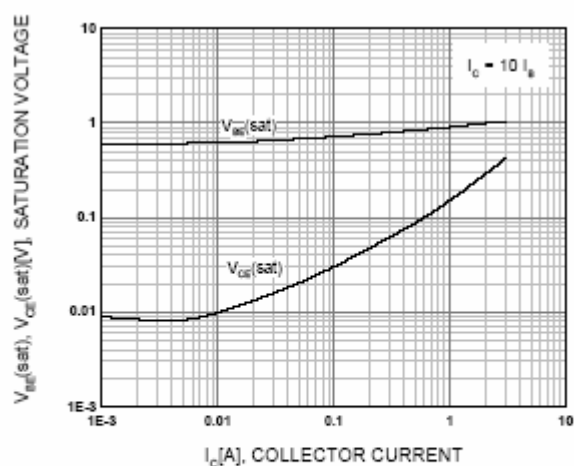


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

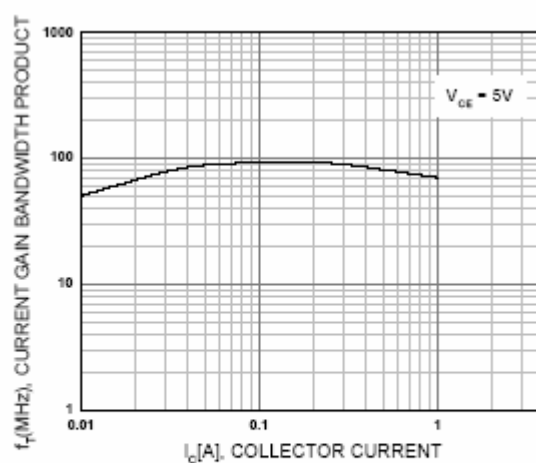


Figure 4. Current Gain Bandwidth Product

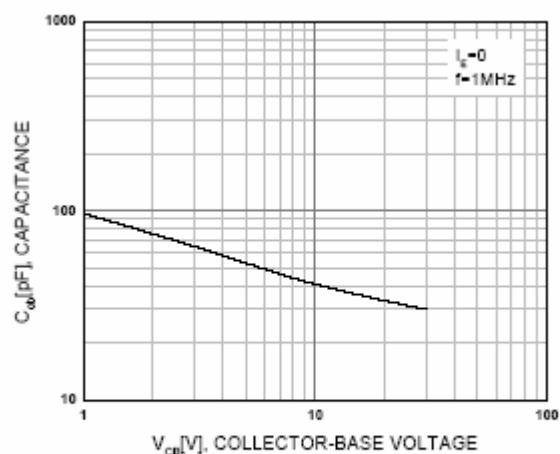


Figure 5. Collector Output Capacitance