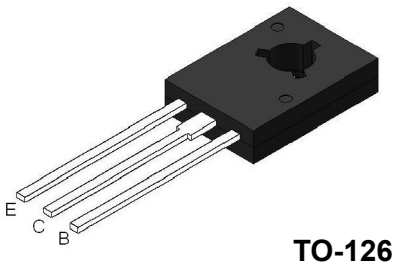
NPN Transistors
D882

■Features

- High current output up to 3A
  Low saturation voltage



TO-126

Absolute Maximum Rating (T_A=25℃ unless otherwise noted)

Parameter		Symbol	Value	Unit
Collector-Base Voltage		BV_{CBO}	40	V
Collector-Emitter Voltage		BV_{CEO}	30	V
Emitter-Base Voltage		BV_{EBO}	5	V
Collector Current		I_C	3	A
Power Dissipation	T_A=25℃	P_C	1	W
	T_C=25℃		10	
Junction Temperature		Tj	150	℃
Storage Temperature		Tstg	-55～150	℃

Electrical Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	I_C = 100μA，I_E = 0	40			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C = 10mA，I_B = 0	30			V
Emitter-base breakdown voltage	BV_{EBO}	I_E = 100μA，I_C = 0	5			V
Collector cut-off current	I_{CEO}	V_{CB} = 40V，I_B = 0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 5V，I_C = 0			1	μA
DC current gain*	$h_{FE}1$	V_{CE}=2V，I_C= 20mA	80			
	$h_{FE}2$	V_{CE}=2V，I_C= 1A	100		400	
Collector-emitter saturation voltage*	$V_{CE(sat)}$	I_C = 2A，I_B = 0.2A		0.25	0.5	V
Base-emitter saturation voltage*	$V_{BE(sat)}$	I_C = 2A，I_B = 0.2A		1.0	2.0	V
Transition frequency	f_T	V_{CE} = 5V，I_B = 0.1A	50			MHz
Output Capacitance	C_{ob}	V_{CB} = 10V,I_E = 0,f=1MHz		45		pF

* Pulse test: PW≤300μs, duty cycle≤2% Pulse

h_{FE} 2 Classification

Classification	Q	P	E
Range	100-200	160-320	200-400

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■ Typical Characterisitics

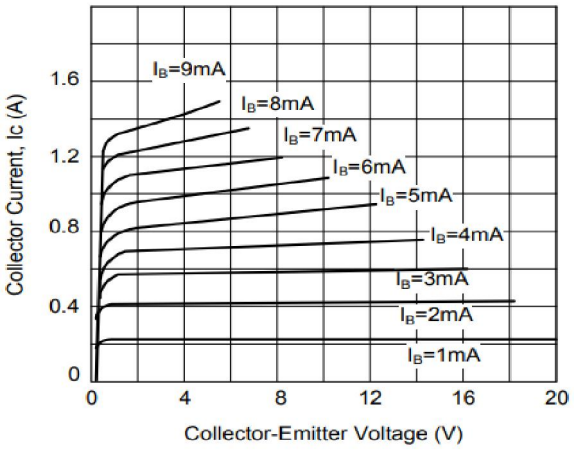

Figure 1. Static Characteristic

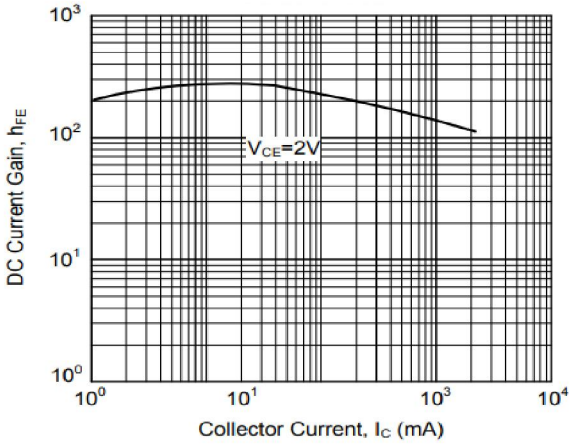

Figure 2. DC current Gain

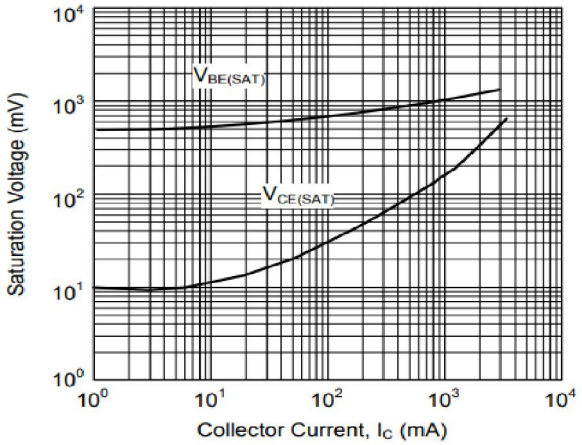

Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

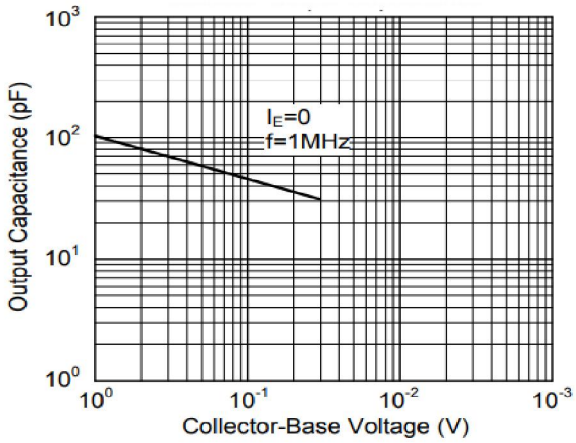

Figure 4. Collector Output Capacitance

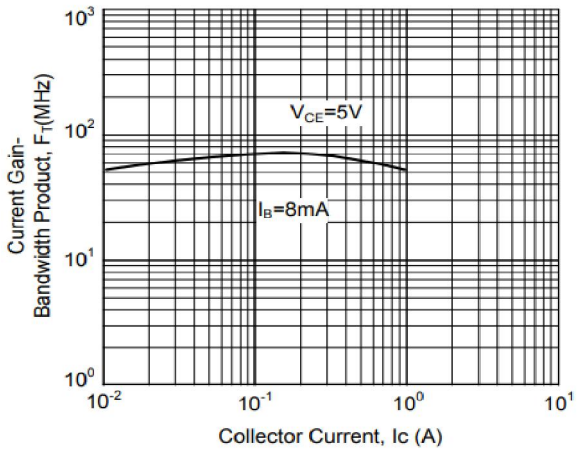

Figure 5. Current Gain-Bandwidth Product

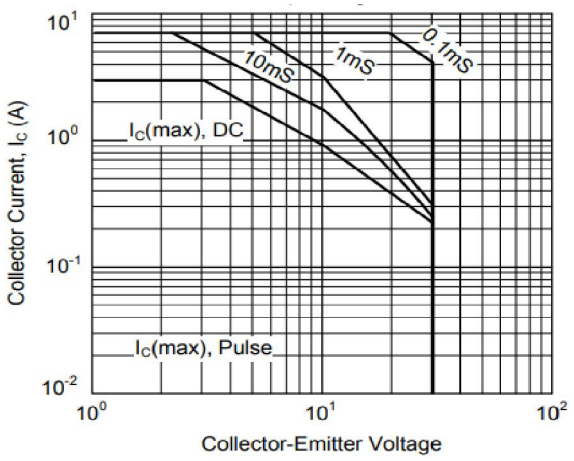

Figure 6. Safe Operating Area