



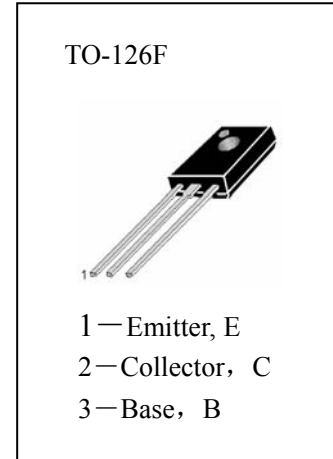
# HBD682

## APPLICATIONS

Medium Power Linear switching.

## ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

T <sub>stg</sub>	Storage Temperature	-65~150°C
T <sub>j</sub>	Junction Temperature	150°C
P <sub>C</sub>	Collector Dissipation (T <sub>c</sub> =25°C)	40W
V <sub>CBO</sub>	Collector-Base Voltage	-100V
V <sub>CEO</sub>	Collector-Emitter Voltage	-100V
V <sub>EBO</sub>	Emitter-Base Voltage	-5V
I <sub>C</sub>	Collector Current (Pulse)	-6A
I <sub>C</sub>	Collector Current (DC)	-4A
I <sub>B</sub>	Base Current	-100mA



## 电参数 (ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C))

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I <sub>CBO</sub>	Collector Cut-off Current			-200	μ A	V <sub>CB</sub> =-100V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cut-off Current			-2	mA	V <sub>EB</sub> =-5V, I <sub>C</sub> =0
I <sub>CES</sub>	Collector Cut-off Current			-500	μ A	V <sub>CE</sub> =-100V, V <sub>EB</sub> =0
*H <sub>FE</sub>	DC Current Gain	750				V <sub>CE</sub> =-3V, I <sub>C</sub> =-1.5mA
*V <sub>CE(sat)</sub>	Collector- Emitter Saturation Voltage			-2.5	V	I <sub>C</sub> =-1.5A, I <sub>B</sub> =-30mA
V <sub>BE(on)</sub>	Base-Emitter On Voltage			-2.5	V	V <sub>CE</sub> =-3V, I <sub>C</sub> =-1.5A
V <sub>CEO(sus)</sub>	Collector-Emitter Sustaining Voltage	-100				I <sub>C</sub> =-50mA, I <sub>B</sub> =0

\* Pulse Test:PW=300μS,Duty Cycle=1.5% Pulsed

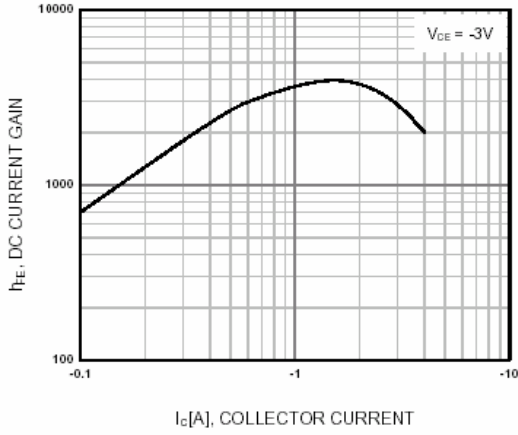
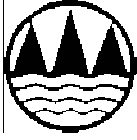


Figure 1. DC current Gain

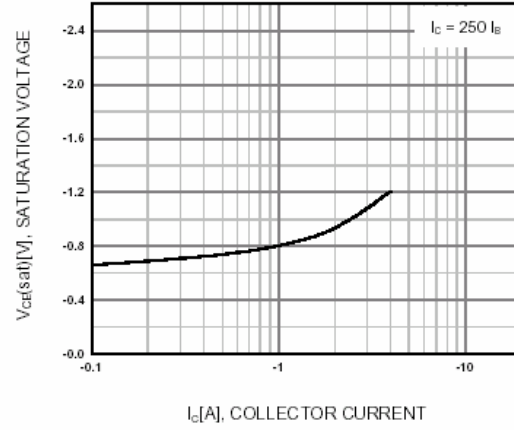


Figure 2. Collector-Emitter Saturation Voltage

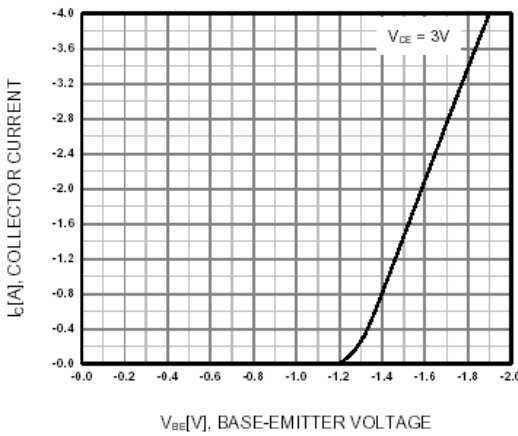


Figure 3. Base-Emitter On Voltage

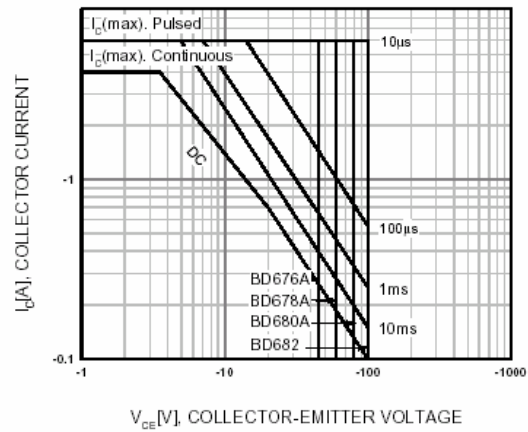


Figure 4. Safe Operating Area

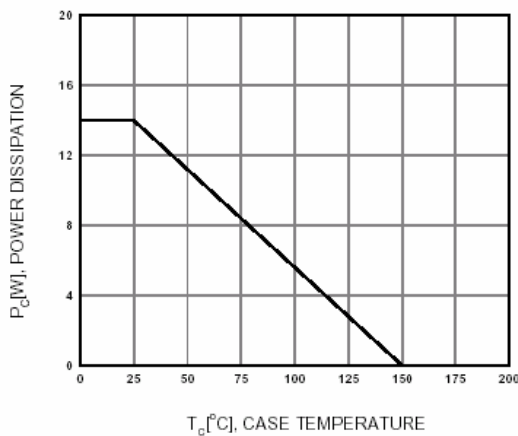


Figure 5. Power Derating